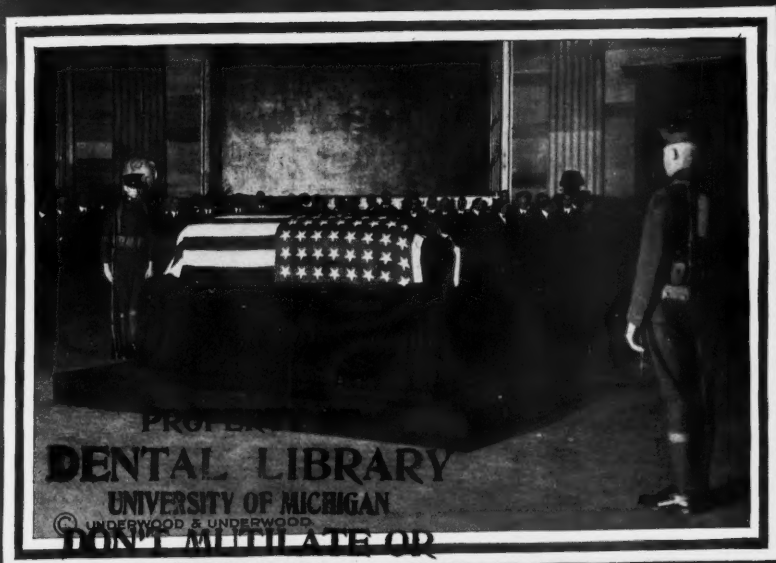


# THE DENTAL DIGEST



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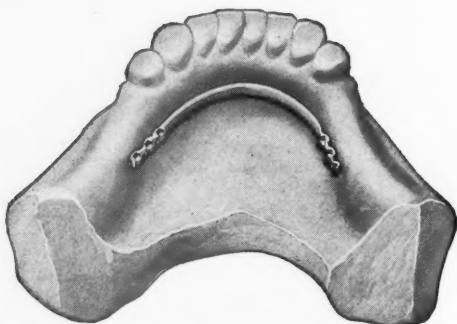
VOL. XXVII, NO. 12

■ EDITED BY ■  
**GEORGE WOOD CLAPP, D.D.S.**  
■ PUBLISHED BY ■  
**THE DENTISTS' SUPPLY CO.**  
CANDLER BLDG. TIMES SQUARE  
220 WEST 42<sup>ND</sup> ST., NEW YORK

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# THE DENTAL DIGEST

Vol. XXVII

DECEMBER, 1921

No. 12

## Importance of Tooth Brush Sterilization

By Dr. S. Joseph Bregstein, Brooklyn, N. Y.

Psychologically, it appears that when the mind is engaged in thinking along a certain direction at times, other topics of an equally vital bearing are overlooked. It is like the salesman who travels many miles for a large order from a certain merchant and, in his zeal, does not see a good many concerns of equal profit to him on the way.

Recent preachings and writings about focal infection and asepsis have diverted attention from the tooth brush. The dentist or physician exerts a great deal of energy and patience in carrying out minutely the principles of asepsis in his current operative work. Which of them would think of inserting an unsterilized mouth mirror into a susceptible mouth? But, when it is a question of something which even they constantly use on their person, many of them seem to forget the teachings of Lord Lister, and feel that they are endowed with a natural immunity to infection produced by an unclean tooth brush.

Carelessness in the cleanliness of the bristles of the brush may be one of the underlying factors of mouth disorders. Washing a brush in running water for a few seconds before and after use is a farce.

The nitrogenous materials from the buccal cavity accumulating by virtue of their adhesiveness upon the teeth are picked up by the brush, and since they are permitted to remain upon the bristles there form excellent culture media for the various micro-organisms of the air and mouth.

Let us stop to consider for a while the composition of a standard culture medium, and compare it with the bristles of a tooth brush after it is placed upon its rack in the morning or at night. The ordinary broth medium is made of finely chopped meat (protein) and water, with a little peptone and sodium chloride added, and then titrated with an alkali. The gelatin medium is prepared the same as the broth but with the addition of gelatin in sheets.

We know that micro-organisms attach themselves by means of *gelatinous* plaques to the surfaces of teeth, and in this way producing caries. Our usual meals, among other ingredients consist of a variety of carbohydrates, protein and salt. Particles of food during the process of mastication are forced interproximally and into the fissures and pits of the teeth.

This debris furnishes sufficient nourishment for the saprophytes and encourages the formation of their plaques. Now, the diligent possessor of the tooth brush removes these masses of "inoculated media," and after rinsing the bristles in cold running water places the brush back on its rack. The usual favorable room temperature, plus moisture, converts each and every bristle into a culture medium seething with not only the organisms of the buccal cavity but any that may be disseminated throughout the room. Then each time the brush is used this is rubbed into the gingivae and proximal spaces.

It is quite essential to get down to the root of the matter and instruct children not only in the care of the teeth and use of the tooth brush, but also in the care and sterilization of the brush.

Heat is the most important of the physical means and doubtless the most important of all means of destroying bacteria. Ordinarily a temperature of 150 deg. C. for one hour, 170 deg. C. for 30 minutes or 200 deg. C. for one minute will kill all bacteria.

Boiling water at 100 deg. C. kills vegetative bacteria in a little less time than two minutes, and their spores in five to thirty minutes. As a matter of fact, nearly all pathogenic bacteria are destroyed in boiling water.

The construction of most modern brushes is such that proper thermal sterilization either loosens the bristles in a short time or causes their handles to become distorted. But why should the meagre price of a new brush stand in the way of prophylaxis, and why is not that adage "an ounce of prevention is worth a pound of cure" not recognized here as elsewhere?

When we stop to consider how easily oral diseases may be prevented with these simple facilities always at our disposal, it is quite surprising that such a condition exists in this decade of scientific perfection.

So, it is opportune for us as students of a new era of Dentistry to promulgate the doctrines of cleanliness to those less informed than ourselves, and become propagandists, so to speak, for prophylaxis in all its extremes.

635 Seventy-fourth Street.

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## Removal of Decay

By Hector Polk, D.D.S., New York City

Thorough removal of decay, while usually effected by careful operators, is sometimes neglected by others. In most cases this failure of removal results from the hypersensitive condition of the dentine to the bur or excavator, which reflects itself in a nervous reaction on the part

of the patient. However, this affords no excuse for leaving the decayed tooth structure, and the operator must insist upon its thorough removal.

I acknowledge that I have experienced not a few uncomfortable moments with some patients in making this attempt, but with a sympathetic word, or a palliative remedy, or by conduction or local injection of novocaine, and if necessary in rare cases, general anesthesia, the desired end was accomplished. With nervous individuals in particular, it is always a good plan to impress upon them one's intention to perform the operation as painlessly as possible, and this should be couched in most soothing terms. By displaying harshness or losing one's temper the difficulties in the way of controlling the patient are increased.

Excavating should always be performed with sharp instruments, and movements in effecting this end should always be quick, light and sure, for it should be borne in mind that heavy, scraping excavating is always accompanied by painful sensations. The direction of cutting should be from the center of the cavity to the periphery, never toward the pulp. Where the bur is indicated, it should be sharp and clean-cutting, and light touches of the sensitive dentine with the bur, revolving at high speed, will remove the tissue with little or no attendant pain.

In cases where excavating cannot be performed in accordance with the foregoing suggestions, a very efficient and safe means of obtunding the hypersensitive dentine is through the application of heated air blown in a continuous stream from one of the ordinary hot air syringes. In following this procedure, it is important to bear in mind that a rubber dam should be employed for the purpose of excluding moisture and protecting the tissues. Before applying the heated air, the cavity should be dehydrated by means of absolute alcohol.

If satisfactory results are not obtained from the above-described method, it becomes necessary to resort to the palliative treatment. For this purpose I have used a paste composed of phenol and tannic acid. The cavity should be lined with the paste and sealed with oxyphosphate of zinc cement, which should be allowed to remain for three or four days. In conjunction with the local palliative, or if necessary, it is advisable to administer the constitutional palliative treatment. For this purpose it is usual to employ a solution of sodium and potassium bromide, about fifteen grains of each to one ounce of water, the whole to be taken about an hour before appointment time. This solution will exercise a sedative influence upon general sensation for a short while.

574 St. Nicholas Ave.





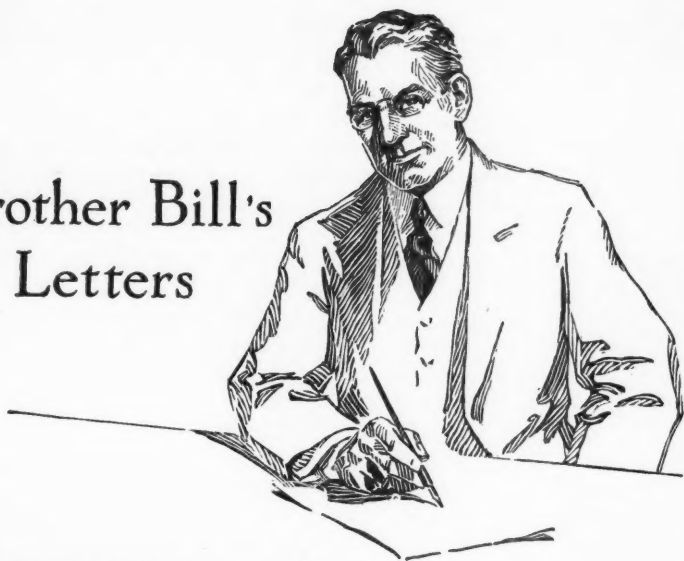
(c) Underwood &amp; Underwood

**SERGEANT SAMUEL WOODFILL**

Sergeant Samuel Woodfill has been called by General John J. Pershing the greatest individual fighter in the A. E. F. Sergeant Woodfill was one of the bearers of the body of the unknown American soldier to Arlington National Cemetery on Armistice Day. When a lieutenant in the 60th Infantry, Sergeant Woodfill reduced in one day three machine-gun nests, killing in hand-to-hand combat nineteen Germans in succession.

Prosthetists will be interested in the very strong facial lines. The photograph is taken from such a position as to make the face appear more tapering than it probably is. The face, seen at a level is probably medium square, or medium square with a slight admixture of the tapering.

## Brother Bill's Letters



*My Dear Nephew:*

Your reply to my letter about ethics being one-half of the science of the square deal makes it perfectly clear why you have not done better financially and why you are so dissatisfied with your whole life plan. What you write completes the fatal triangle of your wrong conceptions and there is nothing in life more fatal to success than wrong conceptions. They put one in the position of a man who has walked far, but happily, in the thought of getting home and finds at night that he has taken the wrong road and is far from home and friends.

Let me summarize briefly the characteristics of two of these conceptions and deal at greater length with the third.

Your conception of success was that it consisted in the acquirement of great professional knowledge and skill. You believed that because of that knowledge and skill people would throng your office, that they would eagerly pay remunerative fees and that all the details of a sound economic structure would somehow arrange themselves about your life. You find that the people throng the office but show no eagerness to pay remunerative fees or to pay promptly. You are often short of money, and such economic details as have arranged themselves in your life haven't made much of a pattern. You have now lifted your eyes from the bright spot that hypnotized you and find that your life contains a family and a home and a whole series of obligations which you must earn enough money to meet by the exercise of your knowledge and skill. And in the light of what is required for them and you in the years that are approaching, your success so far seems pretty small.

Your conception of ethics was that the patient's need and your skill placed upon you all the obligations and with the patient all the rights. Where did you think your family were all this time? You thought it unethical to keep business records, to base fees on known costs, to expect patients to select only work for which they could pay with reasonable promptness, to press for payment of overdue accounts, and to cause patients to pay fees which supported you and yours or go elsewhere for service.

You thought it unethical to learn enough about the road you were following to find out whether it led, in old age, to comfort in your own home or to a seat on the piazza at the County Farm.

And now you write your conception of what constitutes a profession. You say that the first distinguishing mark of a profession is that professional service is more important than non-professional service.

I admit that you have plenty of literary authority for this distinguishing characteristic of a profession as compared with a business. Your acceptance of those authorities merely shows that you have not been thinking for yourself. You could not have thought the thing through even once and accepted those characteristics. Let me show you how mistaken is the idea that a profession is distinguished from a business by the fact that professional service is more important than any business service.

A few weeks ago, a fire broke out in the lower floors of a large apartment house in our town and spread with great rapidity. When the firemen reached the scene, the windows of the upper floors were filled with screaming women and children for whom escape seemed to be shut off. Nothing else in the world was so important to those people at that time as escape from the flames. The firemen quickly raised their ladders and took them out. That was not professional service, because a fireman is not a professional man in the ordinary acceptance of the term. But it was much more important to those people at that time than any medical or legal or theological service could possibly have been.

Another instance is even simpler. A few days ago an incompetent automobile driver placed himself and his family in a position of great danger. By quickness of thinking my chauffeur chose a place in the ditch beside the road which permitted us to avoid hitting the other car, and by dexterity got us down into it without overturning our own car. I feel quite sure that he saved at least two lives, because the other car was small and light and ours was large and heavy. Yet that life saving was not professional service.

A third example is still simpler. A trackwalker for the railroad found that at a place where the rails lie close to the river bank a rail on the outer side of a curve had been loosened. He spiked it firmly in place. Ten minutes later, the fast express went safely over it at 60 miles an hour. It is very unlikely that it would have gone safely over

*"—not professional service, but much more important at that time than any medical, legal or theological service could possibly have been."*



the loosened rail. That service was of the utmost importance to the people in the train, but it was not professional service. And so one might go on indefinitely illustrating the activities of non-professional people upon whom we depend for the merest necessities of life.

So you see that non-professional people render, in the ordinary course of business activities, service which is just as important as human service can possibly be. That seems to me to effectually dispose of the claim that a profession is distinguished from a business by the fact that professional service is more important than business service.

Last, and more deadly than all else, you write that it is the peculiarly distinguishing mark of a profession that it regularly seeks to give more than it gets, while business seeks to get more than it gives. Well, if a profession can keep on doing that, it certainly is distinguished. I thought only God and radium could keep on giving off more than they took in.

I know where you got that definition. You read it in a book. And I know who wrote it. A professor in college who gets a monthly salary for professing. Six months of practical business experience would have made it impossible for him to write it. And about six weeks of devotion to it would make it impossible for you to give anything more. You'd have to either get something or starve.

That professor was theorizing when he wrote that, and his theory either overlooked the difference between the cost of service and the value of that service or was entirely blind to so prosaic a thing as cost.

An understanding of your situation will be facilitated if you first get in mind the difference between cost and value. A pair of rubbers may cost me a dollar and save my life by protecting me during a storm. Their cost is small, their value great. A home may cost \$5,000 and be the centre of such happiness and joy and health as to be priceless. When a person buys anything, professional service, clothes, automobile, or house, he buys it because he expects the value of the thing to him to be greater than the value *to him* of what he gives in exchange.

When I sell anyone professional service, I expect the value of that service to be much greater to him than the price he pays for it, but I expect the value to me of the price he pays for it to be greater than the cost of the service to me. One buys on the basis of value, but sells on the basis of cost. There is no constant ratio between the cost of a thing and its value to the purchaser.

No professional man can sell his services exclusively on the basis of value or practically no one could purchase. What is the value of the service which restores one of my family to health or that takes me from a condition of illness and unemployment to vigor and efficiency? What is the value to me of the diet prescription that keeps me fit and well? How could I pay for any of them once, or, having paid, have anything left to pay again in need?

But for every one of these forms of service there is a readily ascertainable cost. And if the man who renders that service or any other gets his cost back with reasonable remuneration, he can go on rendering that service to as many as need it. What he gets as remuneration, above his cost, is worth more to him than it would be to keep the pills or powders or prescription or operation and get no pay. And he in turn will spend what he gets to buy something of greater value to him than the money he earned.

By the time you have read this far, your fingers must be itching to get to your pen and write me that you know my fees are no longer based on cost plus a reasonable remuneration. And if you said all that is in your mind, you might add that they are based on such unreasonable remuneration that I might as well forget the cost.

I admit the charge, but you wouldn't make it if you foresaw how it clinches all that I am saying to you and really robs you of any material for a reply.

My fees are high, sometimes very high, and they are not palliated by the small number of fine old people for whom I work for nothing and for whom I would rather work any day than for many who pay most, as Kipling says, "Just for the joy of the working."

How does it come that I write one thing to you and do another? Well, I'm not doing another. It's the same thing, only it's a chapter from nearly the back of the book.

I have, as you know, reached the years when the average man's productive years are about closed. Many years of very hard work, some of them badly managed and some wisely managed, lie behind me; I can never tread that road again. I have done just what I hope you will do. As more people have come than I could serve with the technic I enjoy, I have raised my fees and thereby selected from the community that smaller number of people who desire that form of service at my price, and to whom that particular form of service is worth all they can get a chance to pay for it. My fees now range from nothing at all to four times a known cost. My hours are not long, perhaps not longer in the total than the hours spent in the garden or on the links or in unpaid for work for the good of the profession.

A few years from now you will be reaping your harvest. On the professor's theory of giving more than you get, it will be a harvest of penury, hard work, worry and mortification. On the common sense theory of giving great value but getting back more than your cost, it may be a harvest of comfort with moderate work for yourself and unpaid for work for others, happily mixed with whatever form of play you find most enjoyable.

What distinguishes a profession from a business? A generation or two ago, when business was more nearly barter and men went from the plow to merchant princedom by industry and shrewdness, an answer

was easy. But with the development of science and its application to many forms of business, you will be hard pushed to draw a clear line of demarcation. If you will recall your Latin, you may be able to get a little comfort. A profession is something regularly done by a professor, and a professor is one who has been especially trained to do something. In other words, special preliminary training is the foundation of a profession.

In the olden days, three forms of community service were distinguished by preliminary training and they were called the learned professions: theology, law, and medicine. The men who followed them did not originally struggle in the market for a living. They were dependent on somebody and received honoraria, and precious small some honoraria were, too. It was often a condition of genteel poverty, supposed to be compensated for by the possession of more than usual knowledge.

Take an illustration of modern business from your own life. When I was there last, you wanted a suit of clothes and took me into a store where you had often bought good ready-made suits. You are beginning to stoop a little and it is not so easy for the store to fit you as when you were straighter, so you left there and went to a tailor. At the tailor's you selected the fabric, the style, the location of the pockets, etc. When the suit was tried on, you criticized the appearance and fit. The tailor made the suit, using knowledge that you have not, but it is knowledge to be obtained without a long course of special training and is common to many people. The cost of materials also formed an important part of the cost of the suit..

If you are a layman and visit a dentist, you enter upon a world which differs in many respects from that of the tailor. You probably know your need, but not how it can best be met, and must either leave the decision to the dentist or form your decision on the basis of what the dentist tells you and your confidence in him. You are unable to supervise the service or to judge accurately of its value when it is in place. If you are being served by the kind of man both of us want, the charge will be for service, to which materials will be incidental. In other words, you will receive service in a field where extensive special knowledge alone made possible the decision, the direction and the service. If modern education has left anything to distinguish a profession from a business, it is the possession of knowledge and skill obtained only by long special training and service in which materials are merely incidental.

You will find it very difficult to defend these distinguishing claims, especially against the claims of the engineers, the chemists, the astronomers, navigators and others. It is not so very important that you defend them, and it surely would be very foolish to take any airs to yourself with them as a basis.

I have tried to give you this information only because, when I sought to destroy the definition which you wrote me, I had to offer something in its place. Nature abhors a vacuum either in space or in your mind. The important thing is that you should understand the difference between value and cost and that you should give as much value as you possibly can and that you should receive in return a sum at least equal to your cost and your proper remuneration.

All of your hopes of financial comfort in the present and the provision for your family in the future lie in the difference between the cost of the service to you, the value to you of what you receive in return and the use you make of the difference between them.

Bill

### *Synopsis of Previous Letters in This Series*

The first letter, in the October issue, related the nephew's experience in assisting to close the estate of a deceased fellow-practitioner whom he had regarded as successful. There is so little estate as to leave the widow the choice of taking boarders, getting a job or taking the children out of school and sending them to work. This experience causes the nephew to revise his conception as to what constitutes success for a dentist and to resolve that his death shall not find his widow and children in a similar condition.

The second letter, in the November issue, discusses that conception of ethics which places all the rights with the patient and all the obligations on the dentist. It suggests the enlargement of the definition of ethics to include all the more important relations of life and shows that the life distorted by one-sided conceptions will be out of balance in ways not visible to the outside world but of great importance to all whom they directly concern.

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## Failure of Artificial Dentures Under Modern Methods, and a Simple Remedy

By J. W. McLeran, D.D.S., Beatrice, Nebraska

"Undoubtedly the 'fit' of more artificial dentures is impaired by improper packing and closing the flask than by all other causes."—*Wilson*.

That no satisfactory remedy for this fault in our technique has been found, is evidenced by a perusal of the writings of all the prominent Prosthodontists who have given us the advanced methods in impression-taking and articulation.

After obtaining a practically perfect impression, muscle-trimmed and stable in all positions of the mouth, making a model of same of the best artificial stones now on the market, setting up the teeth by the aid of any one of your chosen articulators and methods, then to find, after using every precaution in flasking and vulcanizing, that not only has the fit been impaired but the dentures rock on each other and the occlusion is lost. This necessitates regrinding and often rebasing.

In the manipulation of vulcanizable rubber we have all labored under the misapprehension that the pressure exerted on the rubber in the process of closing the flask is essential to proper vulcanization. This is a mistaken conception of the chemistry of vulcanization, and a practice that should be entirely eliminated from our technique as it is a most pernicious force to control.

No data is at hand as to the extent of the expansion and contraction of rubber that takes place during the process of vulcanization, but the following simple experiment will convince the most sceptical that the expansion (and resultant pressure exerted) far exceeds any subsequent contraction (and drawing away) that we attempt to control by pressure on the flask.

Take a piece of vulcanizable rubber one inch square, and with the lower section of a flask evenly filled with plaster; lay it so as to leave one flat surface exposed. After the plaster has set, lute on to the center of this rubber square one of the ordinary cones of inlay wax. Cover all with separating medium and run the other half of the flask; separate after heating and boil out the wax cone in the upper half of the flask. Close flask in spring clamp and vulcanize case as usual. On opening the cooled case you will find an exact vulcanite reproduction of the rubber square with the addition of the cone you melted out.

What became of your contraction? The rubber was vulcanized before it had a chance to set in to any appreciable extent. Let us therefore eliminate from our technique all pressure on the models and rubber with its resultant ill effects on the completed denture.

*Impression.* It is imperative that the advanced technique successfully used by each individual be used.

*Cast.* Because of the elimination of any heavy pressure to which the cast is ordinarily subjected in moulding the rubber, any good plaster may be used for this purpose.

*Base Plate.* At this point we depart from the usual procedure and follow a method that allows for no chance of distortion in reproducing what we secured in the impression. As we know from our experience with metal base plates, a base plate constructed as a component part of the finished artificial denture is the very best base plate for the occlusion and contour models.

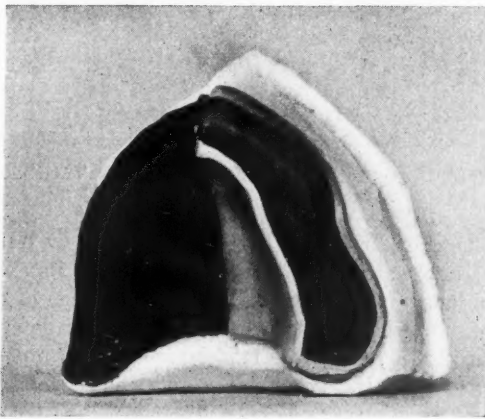


Fig. 1. Shows the Cast "painted" with dissolved black rubber and one-half built up with black and red rubber, as described in text.

On our smooth surface cast we paint a thin coat of liquid rubber to the outline of the base plate desired, covering the entire cast. This "liquid rubber" is prepared from any sheet form of vulcanizable rubber (black preferred on account of purity) cut up in small pieces and dissolved in benzine to the consistency of thick cream. Allow case to stand an hour or so for evaporation of free benzine, then mould a thin sheet of the same colored rubber over the cast and trim with a heated blade to outline of denture. Over the palatal portion and around the periphery, mould another thin sheet of rubber of the color preferred in the finished denture. The case will now appear similar to Figure No. 1 like a wax model for a cast aluminum base plate.

The cast and rubber base is now immersed in water for a few moments and then flaked. Vulcanize the usual period and when case is cold remove base plate. If properly invested the use of a small stiff

hand-brush in water will give you a hard smooth-finished case ready to try in the mouth. Figure No. 2.

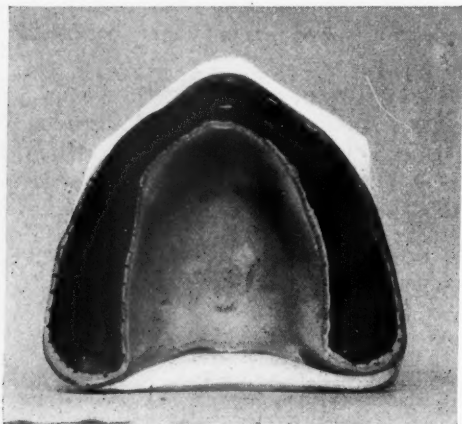


Fig. 2. Shows vulcanized base plate with small retention holes drilled at edge of rim.

The advantages of a vulcanite base plate as stated by Wilson (*Dental Prosthesis*, p. 131),<sup>†</sup> are: (1) It detects a faulty impression before much work is done. (2) It permits study of retention of the artificial denture. If it is evident that the impression was defective, a new impression may be taken and the mistake corrected without much loss of time or labor. (3) It gives stability and support to the subsequent operation of construction.

*Occlusion and Contour Models.* The occlusion and contour models are constructed and mounted on articulator as described in "Professional Denture Service." The teeth are mounted according to the same technic, or the Hall or Monson method, as preferred, except that all waxing of teeth in position on the vulcanite base plate is done on the palatal or lingual surface only.

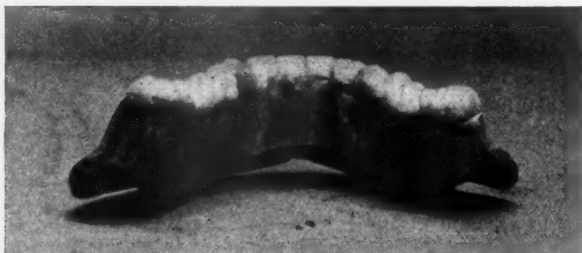


Fig. 3. Lingual side of lower denture with teeth waxed in position.

The full case is now tried in the mouth to prove up as to articulation, esthetics, etc., and the labial portion of the dentures are built up to full contour with pink gum facing-rubber or granular gum, moulded and packed to place by the hand-packed method.



Fig. 4. Labial and Buccal view of lower denture with veneer of pink rubber "ironed" on with warm spatula.

*Flasking and Finishing.* The vulcanite base plate, case inclosed, with the teeth set up as desired, waxed on palatal and rubber-packed on buccal and labial, is now flaked, allowing the plaster to cover the entire case, teeth and all, except the palatal waxed portion. After plaster sets, remove wax with boiling water, pack with warmed vulcanizable rubber of the color desired, fill the remainder of the flask with plaster, close and vulcanize case. Remove case when flask is cold, and with very little finishing you have completed dentures that in occlusion and "fit" are exact duplicates of your "try-in."

Dr. Wilson's only objection to the double vulcanization method is the liability of warping the base plate while closing the flask on the second vulcanization, an objection that does not apply to the foregoing method, as no pressure is used at any stage of the procedure.

Should anyone suggest to himself that this method consumes too much time it can be proven that the time as ordinarily consumed in waxing up the teeth, flasking in two parts, opening the flask, removing the wax, packing the rubber, and closing the flask, is no shorter; and considering the labor required in regrinding to occlusion and often rebasing, there is no comparison in favor of the older method.





1. Dr. J. F. TURNER, 2. Dr. R. W. SPECUTE, 3. Dr. F. S. WEIR, 4. Dr. L. T. ASCHE, 5. Dr. G. M. GANUN, 6. Dr. R. C. LIENAU,  
 7. Dr. W. C. WHITEHORE, 8. Dr. M. W. CASE, 9. Dr. R. W. TENCH, 10. Dr. G. W. CLAPP, 11. Dr. L. W. DUNHAM, 12. Dr. J. R. MEADOR,  
 13. Dr. T. M. HAMPTON, 14. Dr. C. M. CLARE, 15. Dr. N. B. SHAY, 16. Dr. C. E. SMITH, 17. Dr. R. G. HALL.

## The Course in Applied Dental Economics

What is believed to be the first comprehensive course in Applied Dental Economics ever given, closed in New York November 19th, 1921. It was attended by the members of the profession whose pictures and names are shown on the opposite page.

The subject matter of the course was divided under three headings. The first sought to present much larger definitions of success, ethics and rational social development than are common in the profession at present. In the opening address Dr. L. W. Dunham presented a new application of the Bonwill triangle, which he illustrated by the figure here shown.



A definition of a successful dentist was constructed, which was as follows: That dentist is successful who, at the age of 65 possesses a sane mind in a sound body, who can look back upon years of intelligent, conscientious service to his patients, and who is financially situated so that he can do things for his God, his country and his profession without having to be paid for them.

An exhaustive system of professional record-keeping was examined in detail and the manner of making entries to fortify the dentist's position in court was studied. This system was designed to enable the dentist to develop the best quality of service of which he is capable, to help him take his place in the community as a practitioner of a specialty of medicine; and to enable him to co-operate effectively with the foremost medical practitioners.

Under the second division of the instruction a system of business records sufficiently detailed to inform the dentist as to the condition of

every important factor in his practice was presented and the members of the class spent several hours in the making of such records. This was to insure personal familiarity.

Dr. Blaine W. Morgan, Malden, Mass., presented a detailed system for the recording of receipts and expenditures which afforded valuable information. He outlined also his method of recording charges for his own laboratory time. Much time is lost to the accounting systems of dental practices by inaccurate records of time spent in the laboratory.

Dr. W. F. Strangman, Salem, Mass., interested the class by his methods of developing the maximum number of income hours in 1800 office hours. Dr. Strangman has carried his office organization to a very high point in one of the most important items connected with a dental practice, the wise use of time.

Dr. W. F. Spies who has developed a system of collections which permits of few losses, and still maintains satisfactory relations with patients, presented not only his own system but principles which can be applied anywhere.

Miss Juliette Southard gave a paper on "The Dentist as Office Administrator," which held the closest attention of every member of the class and was the subject of interesting discussion.

Dr. Frederick Lester Stanton presented in a graphic and instructive manner the principles of scientific cost accounting. He made this difficult matter plain to every listener.

Dr. Russell Wilford Tench gave an address on "Costs in Denture Service," which showed what it costs dentist to construct dentures in practices of different size and with different qualities of service. He also pointed out the existing relations between a high quality of service and financial success in practice.

The third division of the instruction had to do with the social development in the present and the accumulation of a competency for continuing it in old age.

The first address was by Mr. I. G. Saunders on the subject "Insurance as Investment and Protection." He immediately captured the attention of his audience, and from an intimate knowledge of his subject and of the needs of professional men made a very strong and favorable impression.

Mr. Thomas G. Chamberlain spoke on "Saving as the Foundation of the Fortune," and emphasized truths which, while not new, are of such fundamental importance that they bear frequent repetition.

Mr. Lloyd W. Georgeson, banker, addressed the class on "Investments for Professional Men." He showed the difference between investment and speculation, the folly of speculation by professional men, and the necessity for sound investments. He explained the principles of investment.

November 19, 1921.

George Wood Clapp, D.D.S.  
New York City, N.Y.

Dear Dr. Clapp:-

We, the undersigned, your students of the first class in Applied Dental Economics given in this city, feel so thoroughly elated by what you have taught us, so imbued with the flood of information and faith that you have succeeded in imparting to us, that we wish to extend our thanks to you before we go upon our separate ways, by this small expression of our appreciation.

If any man among us has not absorbed knowledge greatly to his advantage, it is due to no other fault than his own.

You have made us so confident of our future success, which you have proven depends but upon ourselves, that we go forth to our practices with confidence, strong in our new powers and with thankfulness toward you, our instructor and leader:

J. M. Hampton.  
Karl C. Schuman.

Chas. M. Clark  
Gordon M. L. Kuen

Chas. C. Smith

Norbert B. Shay.

L. Thos. Archib

R. W. Specht

Robert G. Hall

J. R. Meador

J. H. Turme  
M. W. ...  
Francis Scott Hill  
Anthony C. Whittemore

The Class in the Applied Dental Economics Course presented  
this expression of appreciation at the close of the Course.

Dr. J. A. Parrin spoke on a subject of much importance. The previous speakers had shown the impossibility of earning more than 5 per cent or 6 per cent on investments, but Dr. Parrin showed that by purchasing in proper quantities and for spot cash dentists could make average profits of more than 20 per cent, and that one was well justified in borrowing money with which to buy on such terms. He also spoke of the economies in time which such purchases often permit.

Dr. Clapp, under whose direction the course was given, spoke on "The Competency for Old Age," and "The Moral Courage to Save Money."

The members of the class visited the offices of Dr. Howard T. Stewart, Dr. H. E. S. Chayes, Dr. R. C. Lineau, and Drs. Reiner and Bluhm.

They were given a special clinic by Dr. Tench on the "Technic for Lower Impressions," and one by Dr. S. B. Moss on "Precision Technic for Cast Restorations." They saw also an exhibition of patients for whom scientific dentures had been made, where "suction" in the lowers seems to be relatively permanent.

The class closed with the feeling by the members that they had been given a bigger conception of the place and value of the dentist and of the possibilities of developing themselves up to that ideal.

They felt also that they had been given a great deal of information of the utmost importance to the proper development of their practices which they might take home and apply to the benefit of their patients and themselves.

It was the sentiment of the class that the instruction was of great practical value on suggesting definite methods by which dentists could develop themselves, and that the frequent repetition of such classes would be of great value to the profession.

Every member came to the class with the understanding that he might have his tuition fee (\$100) back if he considered the information not worth his transportation and hotel expense, and the loss incurred by closing his office for the week.

No requests for return of the fee were made.



## The Importance of the Condition of the Apical Cementum in the Treatment of Apical Infections

By Dr. Thomas P. Hinman, Atlanta, Georgia

As heard in the Audience\*

(This account is neither official nor complete. It represents the impression made by the paper upon one in the audience.—EDITOR.)

Six years ago the problem of treating infected teeth was given a position of major importance in our office. This does not mean teeth that are hopelessly involved, but means more especially those which Dr. Grieves places in Class 6 in his classification, those which he thought should be extracted. We believe a portion of such teeth to be amenable to treatment following a proper diagnosis and that they may be retained. If every tooth from which the pulp is removed must be extracted, dentistry is a failure. Nothing could be more innocent in theory or vicious in practice than the dictum that every pulpless tooth should be extracted.

We decided upon the electric current as the best means of carrying medicine to the infected tissues. We found that a current of one-half milliamperes did not cause coagulation, but that a current of more than one-half milliamperes per canal caused coagulation which acted as a barrier to further treatment.

It has been maintained by laboratory investigators that it is impossible to sterilize the dentine in the peri-apical tissues. Little progress has been made in this direction. Our cases are not hospital cases; they are in the mouths of ambulatory patients. We do not think that even in hospital cases all pulpless teeth should be extracted though they might well receive a different form of consideration. We hope to show that it is possible to effect sterilization.

The minds of many of our profession do not seem to be well trained in differential diagnosis. There is a tendency to practice in grooves. Instead of treating each case as a separate entity and taking into consideration the general physical development and the environment, which has been so potent a factor in the success or failure of all of our operations, the radiograph is now being used by many as a sole means of diagnosing suspected areas about the teeth. The radiograph picture is only one means of diagnosis. It seems absurd for a dentist to bring to a diagnostician a radiograph picture and ask his opinion as to the extraction of the tooth. The picture may show a tremendous area of rarefaction, but to use it as a sole means of diagnosis is unwise.

\* Read before the First District Dental Society, New York, November 7, 1921.

The radiograph does not determine whether or not the tooth is infected because the radiograph can show only areas of destruction of which the infection may or may not be the cause. The cementum, as shown in the radiograph, is one of the most important factors in determining whether or not the tooth should be extracted. Any destruction of this tissue condemns the tooth. It is not always possible to show clearly the condition of the apical cementum, but in the large majority of well-taken radiographs this condition can easily be determined. When a serious rarefaction occurs around the apex, it is always diagnostic. We shall show pictures of a number of cases where there is complete recent re-formation of the lamina dura in areas where it has previously been destroyed. This brings out a point which I believe to be very important, namely, the re-formation of normal bone following proper diagnosis and treatment. I agree with Dr. Grieves as to the danger of overmedication, of too long treatment, or of treatment with too powerful drugs.

It has been noted that apically infected teeth in the mouths of anemic patients will not respond satisfactorily to treatment. Unless the general tissues of the body have a reasonable degree of normal resistance, no amount of treatment at our hands has been of avail.

It is possible to treat apically infected teeth showing destruction of bone so as to permit re-formation of bone tissue. If this is true, is it not reasonable to suppose that the apical cementum has not lost its vitality? Is it not reasonable to suppose that the cementum is alive so that if proper remedies are used to destroy the apical infection, the vitality of this tissue can be regained? In numbers of apically infected teeth, the apical cementum is not dead but is alive. The vitality of such cementum is true, as stated by Dr. Noyes. The problem seems to be one of sterilizing the peri-apical tissues in such way as not to destroy their vitality or function. If the area beyond the apex shows a great amount of infiltration, and the patient's vitality is low, good results can not be expected.

If there is some doubt as to the condition of the apical cementum, it is wise to take a radiograph from each of three separate angles. It is surprising what different opinions may be formed if these pictures are carefully taken.

It is not necessary to take a picture of a tooth to determine whether the apex has been destroyed. One may determine this by tactile sense.

It is unfortunate that our medical friends have taken upon themselves the diagnosis of apical conditions. It is sad to see how many of our men have fallen into the hands of the 100 per cent vitality men and have taken their directions. It is just as unwise for a medical man to condemn a tooth to be extracted as it is for a dentist to prescribe for the removal of an eye.

We need to get back to the horse-sense of some of our older practitioners. There is always a certain number of men who will do a thing just as someone told them to do it, and think it damnable if it is not done in just that way. I do not care for what anyone says; if a man had used his sense to develop reasoning power, he would have too much sense to pull out every pulpless tooth. My appeal is that we should be more careful in diagnosis and that we should begin to think what we can do for humanity and the salvation of the people.

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## The Destruction of Apical Infection

By Dr. Harry B. Johnston

For the past six years it has been our practice to ionize each infected or suspected tooth before filling the pulp canal. With the solutions which we then had, we got some excellent results. For several years we have been experimenting with the use of zinc chloride, sodium chloride and three-per-cent iodine. For the past twenty months we have been using Churchill's tincture of iodine, and with this we have obtained remarkable results. This solution has an electro-chemical strength of 19 per cent of iodine and is intensely electro-active.

Sodium chloride has been extensively used for ionization, but the studies of the electro-chemists demonstrate that it contains no medicinal properties. The only result from ionization with this solution comes from the passage of a mild current through the tissues. The passage of this current is of some value in producing hyperemia, but it is not germicidal nor antiseptic.

Zinc chloride is of slightly more effect than sodium chloride, but even its most enthusiastic admirers do not claim that it is more than slightly antiseptic.

The percentage of iodine in the three-per-cent iodine solution is so low that the amount of solution that can be placed in a tooth can not be of much value unless the solution is very frequently renewed. The canals of the average tooth will permit the placing of a sufficient quantity of such a concentrated solution as Churchill's, so that it remains electroactive for a considerable period of time.

The properties of the iodine are entirely changed by ionization, some characteristics being diminished while others are strengthened. For instance, free iodine is a powerful irritant, but ionized iodine is only mildly stimulating. The germicidal action of free iodine is superficial. The germicidal effect of ionized iodine may be exercised at practically any desired depth. Iodine is the most intensely electro-active of the elements commonly used in ionization; 3.8 times as much iodine as zinc chloride will be driven into the tissues in a given length

of time by a given strength of current. We have proved by experiment that the iodine in this solution will be entirely driven out of 15 drops of solution by a current of  $\frac{1}{2}$  milliamperes in 30 minutes. This quantity of iodine will be sufficient for a large area of tissue. Clinically, the results of this method of ionization have been astonishing. We have used it in all types of cases and our results are astonishing. We have used it in all types of cases and our results have been uniform except where the apex of the tooth has been resorbed. More than 150 of these cases have showed pus, with drainage through the root or the buccal or lingual tissue. In only three cases considered salvageable have we been unable to stop the pus with 30 minutes of ionization, and closure of the sinus has followed in from 24 to 48 hours. When the sinus has been through the tooth, it is closed immediately by filling of the roots. In the great majority of cases, where the sinus is through the buccal or lingual tissues, it is closed by the following day, so that no opening can be found with a fine probe.

The technic of filling the roots is simple. After the canals have been thoroughly cleansed, they are dried with absorbent points. The iodine solution is placed in the pulp chamber and pumped until it is in contact with the apical tissue. The negative pole of the ionizing machine is then passed into the solution and the positive pole is put on the inside of the cheek or lip. The current is adjusted to  $\frac{1}{2}$  milliamperes for each canal. For three canals it should require  $1\frac{1}{2}$  milliamperes. Under ideal conditions there will be little resistance to the current and little pain produced. If the resistance is high, the trouble should be located and removed. The resistance of the tissues to the current seems to play an important part, but just what or why is not exactly known. There seems to be a distinct ratio between the tissue resistance and the electro-chemical activity of the iodine.

If the ionizing machine does not have an accurate guide as to the amount of resistance to the current, which is characteristic of normal tissue, a test can be made in the following manner: Pour enough normal salt solution on a cement slab to make a pool three inches in one direction. Immerse the electrodes in this pool, three inches apart. Pass the current through and note the amount of resistance. This is the resistance which should be experienced from normal tissue. If much higher resistance is experienced, the cause should be sought for and, if possible, corrected.

The electrode which is to be introduced at the tooth should be flattened and pointed to facilitate the passage of fresh iodine to the foramen. A round wire in a round canal closes the canal and the only effect is that from the solution which happens to be beyond the electrode. The flattening of the point of the wire permits the diffusion of fresh solution to the apex as rapidly as the iodine is driven out by

the current. If the pulp chamber is very large it may hold enough for the entire operation, but if small, fresh solution may be needed as often as every 10 minutes. At each replacement fresh solution should be pumped into the canals.

We ionized our first two cases only 15 minutes. Investigation and experience showed that 30 minutes were required for sterilization.

Dr. Johnston then showed a number of slides and gave verbal descriptions, from which the following were noted.

Case 1. Girl, 13 years old. First molar. Persistent flow of pus through the roots. Pus removed with  $H_2O_2$ . Churchill's solution of iodine placed in three canals and current of  $1\frac{1}{2}$  milliamperes for each canal was applied for 15 minutes. Canals filled immediately. No pain and the tooth comfortable and capable of mastication.

Case 2. Boy, 14 years old. Acute abscess lower left first molar. Treatment and results identical with Case 1.

Case 14. The worst case of its type up to this time. A woman with a sinus of five months' standing, presenting seven or eight openings in the buccal tissue. Two canals; current of 1 milliampere. 24 hours later sinus closed; no pain or soreness.

Case 106. Woman, 22 years old. All symptoms of acute abscess in upper right first bicuspid. Pulp chamber cleaned out, canals cleaned, Churchill's solution pumped in, ionized 30 minutes, the solution being renewed once. In 24 hours the ugly sinus had closed entirely, only a spot of scar tissue remaining.

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## A Thought About the Red Cross Report

At the meeting of the First District Dental Society, New York, November 7, 1921, a representative of the American Red Cross stated that the dental surgery program of the New York County Chapter had been carried on entirely under the advice and guidance of representative members of the First District Society. In the field of oral hygiene, clinics have been opened at three Red Cross stations, one on the lower East Side, one on the lower West Side and another at 129th Street. The Chapter opened also last Spring, at the request of the Commissioner of Health, four oral hygiene clinics in public schools. During the time which has elapsed since these were opened, 7,445 children have had their teeth cleaned at these clinics; 10,051 have had their teeth filled, free of charge, by the help of volunteer dentists of whom there are, at present, eight. 656 children have had their teeth extracted.

He stated that the work could not be continued except by public support and hoped that each person present would continue to be a member and supporter of the Red Cross,

## Report of a Case of Pyorrhea

By Dr. Bernard Link, New Haven, Conn.

I was very much impressed with Dr. Wm. Ziesel's method of pyorrhea extermination, namely, Gingivectomy, as published in *Dental Cosmos*, April, 1921, and at the first opportunity which presented itself made use of it with success.

Miss X, age about 25, presented with a typical case of pyorrhea alveolaris. Gums were red, turgid, spongy, and bled at the slightest touch. The teeth were covered with tartar and mucous plaques and actually floating in pus. The thick, greenish-yellow pus was oozing from the sockets of the lower left lateral, cuspid, first and second bicuspid and first molar, and upper right second bicuspid, first and second molars. The latter three teeth were so far gone that they had to be extracted. A veritable stream of pus exuded upon removal of the teeth. Suitable treatment was given, which eventually healed up the area beautifully.

Patient was dispirited, complexion sallow, and she had a general listless attitude.

At the next sitting the treatment of the lower teeth was taken up. The mouth was flushed with a warm solution of glyco-thymoline and the teeth cleaned of all calcareous deposits. A mandibular injection was given and the broken down, bathed in pus, lower left first molar was removed, showing a large apical abscess on the mesial root. The socket was cleansed and curetted. A further mental injection was given after the area to be operated on had been swabbed with tincture of iodine. With an ordinary sharp lancet for my purpose, an incision was made well below the infected socket of the first molar and carried mesially on the buccal and labial surfaces up to and including the left lower lateral.

The gum tissue was removed in one continuous strip, exposing the roots of the teeth involved. The bleeding that followed was stopped by means of sterile cotton rolls, and the exposed roots and alveolar process were flushed with warm glyco-thymoline, and then carefully gone over and all calcareous and other deposits removed. All unhealthy process was chiseled away and smoothed off. Roots and teeth were then polished as well as could be done under the circumstances. A further syringing with the antiseptic above mentioned took place. Patient was then discharged, with strict instructions as to prophylaxis and diet, and ordered to report at two day intervals for inspection. Three weeks after operation the gums had healed nicely, were hard, pink and the teeth firm.

A few days ago the lady in question dropped in and I was surprised at her changed condition. There was color in her cheeks, and she was full of "pep" in comparison to her listless attitude of a few months ago.

Without a doubt Dr. Ziesel has the correct procedure to eliminate the scourge of dentistry, and I heartily commend it to other practitioners.  
51½ Church Street.

## The Griswold Crown

A PRACTICAL METHOD OF CROWNING MOLARS AND BICUSPIDS

By Gilbert M. Griswold, M.D.S., Hartford, Conn.

The accompanying cut illustrates a simple but very practical method of crowning badly broken down molars and bicuspids. It takes the place of the "two piece" gold crown that is so unsightly, and which often "covers a multitude of sins."

This method has been used by me in my practice for the last seven years, and has proved very satisfactory.



**METHOD OF INSERTION.** Thoroughly prepare the root by properly trimming and beveling to receive the gold band. Cut the band from 22 carat 30 gauge gold plate, being careful to get exact length with copper wire ligature. Get width of band by measuring height of adjoining teeth when jaws are closed. Have band sufficiently wide to trim lower edge corresponding to gum line. Do not let it extend below gum line unless absolutely necessary. Cut a small triangular piece from the upper corner of the strip of gold and unite the narrow ends with 20 carat solder, then adjust the band to the root.

Select a suitable diastoric tooth. Trim upper edge of band to receive the tooth. Adapt under surface of tooth, by grinding, to upper end of root, then slightly bevel lower edge of tooth to enter band. Get proper adjustment of band and tooth in the mouth to obtain occlusion. Trim and polish lower edge of band so that there will be no place for the lodgment of deposits to irritate gum tissue. Trim and polish upper edge of band about the porcelain so that there will be no projecting edge. All of this can easily be done out of the mouth.

Having completed the crown, dry the root thoroughly with alcohol and warm air. Place tooth in band and fill with rather thin cement. Press gently but firmly to place on the root. The cement will fill all spaces completely. When the cement is thoroughly hardened the crown will be sufficiently strong to resist the stress of mastication, without

using the objectionable metal post or pins. We now have a crown that is strong, and not a disfigurement. This operation can be accomplished without investing and soldering, and in one-half the time it would require for any other combination of gold and porcelain.

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Speaking of the Griswold Crown, Dr. E. S. Gaylord, of New Haven, Conn., writes as follows:

"I use it in my practice, endorse it to my friends, and I am now having a recently broken second superior bicuspid (a vital tooth) restored with a Griswold Crown in my own mouth; I am sure I commit myself, but not too strongly, in favor of this easily-constructed crown, having abundant strength, representing as it does the natural tooth, and best of all bars the horrible gold crown with a man having the interests and good looks of his patients at heart."

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### **Meeting for the Organization of a Society by Dental Nurses, Secretaries and Dental Office Managers**

A meeting will be held for the purpose of forming a society for the co-operation and advancement of Dental Nurses, Secretaries, and Dental Office Managers, on December 7th, at 8 P. M. sharp, Room 2201, Candler Bldg., 220 W. 42nd St., New York City.

The following addresses will be given:—

"Why Dental Office Assistants Should Co-operate."

DR. CHAUNCEY M. F. EGEL.

"Does the Dental Office Offer a Field Worthy of the Efforts of a Capable Person?"

DR. THADDEUS P. HYATT.

"What is expected of his Assistants by the Dentist."

DR. HENRY FOWLER.

"The Dawn of a New Day."

DR. GEORGE WOOD CLAPP.

This proposed organization will meet a demand that has long been felt by those employed in dental offices. Further information may be had by communicating with Juliette A. Southard, 174 West 96th St., New York City. ('Phone 3690 Riverside.)



### I'll Extract

(With apologies to J. M. B.)

Have your molars got a kink?

I'll extract.

Are your canines on the blink?

I'll extract.

Have your centrals a green stain?

Are your laterals on the wane?

Are your jawbones full of pain?

I'll extract.

Do bats infest your dome?

I'll extract.

Do you brew a keg of "home"?

I'll extract.

Have you landed a new berth?

Have you sudden fits of mirth?

Have you added to your girth?

I'll extract.

If your soul is full of sin,

I'll extract.

Should you sit upon a pin,

I'll extract.

There's not a thing you know,

Not a touch of pain or woe,

Including all your dough

I won't extract.

—M. H. N.

## Radiography in its Relation to Root Canal Technique

A Report of a Lecture-Demonstration by Dr. Edwin J. Nestler of the Columbia University Dental School, before the Pathodontia Section of the First District Dental Society of New York.

This report is not intended to give a complete account of the meeting but simply sets forth the impressions of one who sat on the "benches."—EDITOR'S NOTE.

The first meeting of the Pathodontia Section of the First District Dental Society was held at the New York Academy of Medicine, October 24th, with Dr. Edwin J. Nestler of the Columbia University Dental School as essayist. Dr. Nestler took for his subject, "Radiography in its Relation to Root Canal Technique" and he showed, conclusively, by lantern slides and demonstration that it was desirable to take a number of radiograms of the tooth or teeth and surroundings in order that the best and truest picture of the condition be secured; that it was possible to determine the length of roots, and follow the course of treatment and filling of root canals by having radiograms taken from *known* angles which could be duplicated as many times as necessary.

Most operators realize that one of the most important points in root canal work is a definite knowledge of the length of each root to be treated and filled. They know that the patient's response to pain during instrumentation is not a reliable indication and also that instruments repeatedly pushed through the foramen only produce irritation to the tissue which is already injured, and that such additional trauma cannot possibly benefit the case, but rather tends to retard the healing process. Dr. Nestler made this plain and then gave a simple, definite method of root measurement. Briefly, the method consists in introducing a sterile diagnostic wire nearly to the end of the root and extending slightly past the occlusal or incisal end of the tooth; with the film held *flat* (not curved) in the mouth, by means of the Van Woert film holder the rays are directed from different *known* angles. The resulting radiograms are compared and the one which bears an *image* of the diagnostic wire (showing both ends) which is exactly the length of the diagnostic wire, is selected as being the true image of the tooth length, because if the *image* of the wire is exactly the length of the actual wire it naturally follows that the image of the tooth (in which the diagnostic wire is inserted) is the same length as the actual tooth—"Things that are equal to the same thing are equal to each other." The essayist showed by diagram the influence of curvature of the film on the image, and he also brought out the effect of different angles on the length of the image, showing, for instance, that rays

directed at an angle of 30 degrees cast a shadow shorter than actual length, while an angle of 40 degrees made the *image* longer than the *actual length of the tooth*.

The method which Dr. Nestler presented, makes it possible to secure any number of radiograms showing precisely the same view of the tooth and its surroundings taken at the angle which gives the best picture during all stages of treatment and after, affording a definite check on the conditions, and he emphasized the necessity for having several radiograms rather than the usual two or three.

The Van Woert film holder (which holds the film flat) has a small cylinder which receives a thin straight wood applicator, and which may be moved in two directions, and its exact position is registered on two protractors. When the film-holder with wood applicator is in the mouth the cone or cylinder of the X-Ray tube is brought into position with the applicator laid along the straight side of the cone of the X-Ray tube parallel to the direction of the Rays.

The successful use of this method depends on the use of a tube-holder that registers the position of the tube just as the relation of the film to the direction of the rays is registered.

This method brings to the making of dental radiograms the possibility of accuracy instead of the hit or miss results which are usually found in routine procedure when the position of the film and the tube is a matter of guesswork.

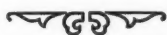
The only discussion of the paper was by Dr. M. L. Rhein, and was an excellent example of a kind of discussion which ought not to be encouraged, because it is destructive in character and would tend to discourage or scare out many young essayists who will be of great benefit to the profession.

It sounded from the "benches" as though Dr. Rhein were trying to put into the essayist's mouth expressions or sentiments which he had not advanced, and then finding fault with him for them. He was liberal also in condemnation of methods which even those of us who have neither the essayist's skill nor Dr. Rhein's reputation, know to have at least some value.

Fortunately the essayist was well grounded in his subject, was of courage, and had good control of his temper.

It will be well for the entire profession when dentists who rise to criticize a paper learn to stick to the subject, to charge the essayist only with his actual crimes and to either offer constructive criticism or leave the floor to those who can.

"A moth can destroy a fabric which only the world's greatest weaver can produce."



## Dental Anomalies

(Continued from November)



DR. H. A. MAGRUDER  
El Paso, Texas



DR. JOHN H. PERMAN  
Worcester, Mass.



DR. ALBERT A. GOLDMAN  
Oil City, Pa.



DR. S. JEWETT  
Watsonville, Cal.

# DENTAL LAWS

## Examination Acts in U. S. of America

By Alphonso Irwin, D.D.S., Camden, N. J.

### CODIFICATION

*(Continued from November)*

#### UTAH—LAW 1917

SEC. 10. Any person who desires to practice dentistry in this state shall file with the Secretary of the Board a written application for license and furnish satisfactory evidence that he or she is at least twenty-one years of age, of good moral character, and that he or she is a graduate of a reputable dental college recognized by the National Association of Dental Examiners, and that he or she before entering such dental college was a graduate from a high school or similar institution of learning accredited by the University of Utah, or any other university of equal standing, and which high school or similar institution of learning requires four years of instruction for such graduation, or an academic education in the equivalent thereof; or, in lieu of such graduation from high school and from such dental college, has been a duly licensed practitioner of dentistry for at least five years next preceding such application in a state having requirements as to qualifications and examinations not less than those of this state. At the first meeting of the Board thereafter he or she shall appear before the Board and pass a satisfactory examination in the English language in the following subjects: Anatomy, physiology, hygiene, chemistry, materia medica, therapeutics, metallurgy, histology, pathology, bacteriology, operative, surgical and mechanical dentistry, and shall also demonstrate in operative and mechanical dentistry, if required by the Board.

SEC. 11. If the examination prove satisfactory to the Board, it shall issue a license to the person examined, which shall be signed by the President and the Secretary and the other members of the Board, and have the official seal of the Board affixed thereto.

#### TEMPORARY LICENSE

SEC. 12. The Secretary shall upon the recommendation of any three members of the Board, grant to any applicant for a license a temporary license to practice dentistry until the next meeting of the Board, at which the applicant is required to present himself for examination, at which time such license shall expire. Such temporary

license shall not be granted to any person who has been rejected by the Board.

Secretary, J. F. Christianson, 1002 Walker Bank Building, Salt Lake City, Utah.

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#### VERMONT—LAW 1917

SEC. 6109. *Examinations; qualifications of applicants; fees.* A person over twenty-one years of age, of good moral character and who is a graduate of a reputable dental college or school, or of a college or school authorized by law to grant diplomas in dentistry, and who is a graduate of a high school or academy offering a four-year course approved by the State Board of Education, or who furnishes evidence of an education equivalent to that of such a high school, shall, upon the payment of a fee of twenty-five dollars, be entitled to be examined, and, if found qualified, shall be licensed to practice dentistry, dental surgery and medical dentistry, and shall receive a license signed by the members of said Board. The examinations shall be elementary and practical, but sufficiently thorough to test the applicant's fitness; they shall be wholly or in part in writing, in the English language; and shall embrace the subjects of anatomy, physiology, chemistry, materia medica, therapeutics, metallurgy, histology, pathology, bacteriology, anesthesia, oral surgery, operative and prosthetic dentistry; orthodontia and crown and bridge work, with demonstrations by the applicant in operative and prosthetic dentistry. An applicant who fails to pass a satisfactory examination shall be entitled to a re-examination at any future meeting of the Board without payment of a fee, but for any subsequent re-examination a fee of five dollars shall be paid. Rules relating to qualifications of applications and to conduct of examinations and to the granting of licenses may be made by said Board.

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#### VIRGINIA—LAW 1920

##### EXAMINATION OF APPLICANTS

Section 1614. (c) The said Board shall grant a certificate of ability to practice dentistry to all applicants who undergo a satisfactory examination and receive at least four affirmative votes. This certificate shall be signed by the members of the Board and be stamped with a suitable seal which they may adopt.

(d) The said Board shall keep a book in which shall be registered the name and qualifications of every person to whom such certificate is granted.

(e) The said Board shall inquire into the qualifications and truthfulness of representations of any applicant for a license to practice

dentistry, and for such purposes shall have power to send for witnesses, papers and documents, and administer oaths.

#### EXAMINATIONS FOR LICENSES

Abstract: Section 1646. No person, unless previously licensed or registered to practice dentistry in this State at the time of this act shall become operative, shall begin the practice of dentistry, or any branch thereof, without first applying for and obtaining a license for such purpose from the Virginia State Board of dental examiners.

Applications shall be made to the said Board in writing, and shall be accompanied by the examination fee of ten dollars (\$10).

The applicant must be of good moral character and twenty-one years of age, or over, at the time of making the application. Application from a candidate who desires to procure a license from said Board to practice dentistry in this State shall be accompanied by satisfactory proof that the applicant so applying for license is a graduate of, and has a diploma from the faculty of a reputable dental college, school or dental department of a reputable university or college, or has been engaged in the actual legal and ethical practice of dentistry in some other State or country for five consecutive years just prior to application. Examinations may be made, orally or in writing, in whole or in part, at the discretion of the Board, and shall be of such character as to test the qualifications of the applicant to practice dentistry. The said Board shall, within thirty days from the beginning of the examination, notify each applicant of the action of the Board on his examination.

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#### WASHINGTON—LAW 1901

##### AMENDED TO 1913

Section 4. (As amended session laws, 1901). Any person or persons seeking to practice dentistry in the state of Washington, or to own, operate or cause to be operated or to run or manage a dental office or place for the practice of dentistry in the state of Washington after the passage of this act shall file his or her name, together with an application for examination with the secretary of the State Board of Dental Examiners, and at the time of making such application shall pay the secretary of the Board a fee of twenty-five dollars, and to present himself or herself at the first regular meeting thereafter of said Board to undergo examination for that body. No person shall be eligible for such examination unless he or she shall be of good moral character and shall present to said Board his or her diploma from some dental college in good standing and shall give satisfactory evidence of his or her rightful possession of the same.

Provided, This section shall not apply to persons engaged in the practice of dentistry at the time of the passage of this act who are bona fide citizens of the state of Washington.

All persons successfully passing such examination shall be registered as licensed dentists in the Board register as hereinafter provided, and also receive a certificate to be signed by the president and secretary of said Board and in substantially the following form, to-wit:

This is to certify that.....is hereby licensed to practice dentistry in the state of Washington. This certificate must be filed for record in the office of the auditor of any county in which the party holding such certificate desires to practice, and it is unlawful for him (or her) to practice dentistry in any county in which said certificate is not filed for record.

Dated at.....this.....day of.....  
A. D. 19....

.....  
President of said Board of Examiners.

.....  
Secretary of said Board.

### WEST VIRGINIA—LAW 1915

#### AMENDED 1919 AND 1920

(3). *License and Registration and How Granted.* No person shall practice dentistry in this state or attempt to do so after the passage of this act without first applying for and obtaining a license for such purpose from the said West Virginia State Board of Dental Examiners, and registering such license as herein provided, and this provision applies to all persons whether they have heretofore practiced dentistry in this state or not, except such persons as have been heretofore licensed and registered, or who were engaged in the practice of dentistry in the state of West Virginia before the passage of any law by said state regulating such practice. Application shall be made to the said Board in writing at least fifteen days previous to the date of such examination for license and shall, in every instance, be accompanied by a photograph of the applicant, and the examination fee of twenty-five dollars, which sum is authorized to be charged for such examination by said Board. The applicant must be of good moral character, at least twenty-one years of age at the time of making the application, and the application of such person seeking a license must be accompanied by satisfactory evidence to said Board that the applicant so applying is a graduate of and has a diploma from the faculty of a reputable dental college, dental school, or dental department of a reputable university, and shall pass examination on the following branches: Anatomy, physiology, bacteriology, histology, pathology, *materia-medica*, anesthetics, chemistry, metallurgy, oral-surgery, operative-dentistry, prosthetic-dentistry, crown and bridge work, gold and porcelain inlays, or such others as the Board may from time to time deem proper. Examination must be both written and

clinical, and of such character as to thoroughly test the qualifications of the applicant to practice dentistry; and the Board may, in its discretion, refuse to grant license to any person they find guilty of cheating, deception or fraud during such examination.

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### WISCONSIN—LAW WITH AMENDMENTS TO 1919

*Examination; license.* SECTION 1410h. 1. No degree in dentistry shall be conferred in this state except the degree of doctor of dental surgery. Said degree shall not be conferred upon any one unless he shall have satisfactorily completed a course of at least three years of eight months each in a recognized dental school. No dental college or dental department of a university shall accept for enrollment any student who shall not place on file, prior to such enrollment, with the secretary of the Wisconsin State Board of Dental Examiners, credentials proving to the satisfaction of the Wisconsin State Board of Dental Examiners, that he has a general education equivalent to that required for graduation from a high school or academy in the state of Wisconsin, having a four-year course beyond that of the eighth grade of the elementary school.

2. No person shall be examined by the Board for a license to practice dentistry in this state, who shall not file with the secretary of the Board credentials proving to the satisfaction of the Board, that he has a general education equivalent to that required for graduation from a high school or academy in the state of Wisconsin, having a four-year course beyond that of the eighth grade of the elementary school, and who is not a regular graduate of a reputable dental college or dental department of a university; provided, however, that the privileges of such examination are not denied an applicant therefor who holds a license to practice dentistry in some other state than Wisconsin prior to January 1, 1909.

3. Such examination shall be in writing and shall include the subjects of anatomy, anesthesia, bacteriology, chemistry, histology, materia medica, metallurgy, pathology, physiology, prosthetic dentistry, pharmacology, physical diagnosis, oral surgery, orthodontia, oral hygiene, operative dentistry, therapeutics, toxicology and such other subjects as the Board may deem necessary, provided they relate to the science of dentistry. The Board shall also require as part of the examination, demonstrations in operative and mechanical dentistry.

4. If such examination shall prove satisfactory to said Board, the Board shall issue to such person a license to practice dentistry in this state which shall grant to the person named therein the right to pursue the practice of dentistry in all of its branches as they are enumerated

above. All licenses shall be signed by the members of the Board and be attested by the president and secretary.

5. The State Board may, without examination, issue a license to any applicant therefor, who shall furnish satisfactory proof to said Board, that he has been duly licensed to practice dentistry in some state other than Wisconsin, and that he has been lawfully and reputably engaged in said practice for five years next preceding his application; said proof must be deposited in person with the secretary of the State Board of dental examiners of this state. Provided, however, that the state or states in which such applicant has so practiced dentistry requires or require a preliminary education, equal to that required in this state, of all applicants for licenses to practice dentistry in this state, and provided the state or states in which he has so practiced dentistry extend or extends to the dentists of this state, who may remove to said state or states a similar privilege of practicing dentistry without examination; provided, however, that if a dentist who is licensed to practice in this state removes to another state and engages in the practice of dentistry in said state, he shall have his name carried on the list of dentists of this state upon the payment of the annual registration fee while out of this state. The fee for such license shall be twenty-five dollars.

6. The State Board may, however, in its discretion admit to the licensing examination dental students who have successfully completed at least two years' work of eight months each in a recognized dental college or dental department of a university, and who shall file with the secretary of the Board, credentials proving to the satisfaction of the Board that he has a general education equivalent to that required for graduation from a high school or academy in the state of Wisconsin, having a four-year course beyond the eighth grade of the elementary school, permitting such students to participate in such theoretical examination as the Board shall determine. The satisfactory grades made by such two-year dental students may be credited to them at the time they appear for their licensing examination. The participation in this examination, however, shall not in any way entitle such person to any right or privilege to practice dentistry until he shall have secured a license. The Board may require a fee of ten dollars for such examination.

7. Any one who is a legal and competent practitioner of dentistry in this state and of good moral character who desires to change his residence to another state shall, upon application to the secretary, receive a certificate signed by the president and secretary and bearing the Board's seal, which shall attest the facts above mentioned. The fee for such certificate shall be five dollars.

8. A duplicate license granted upon proof of the loss of the original

shall be issued by the Board upon payment to the secretary by the applicant of a fee of five dollars.

## WYOMING—LAW 1915

### EXAMINATIONS

SEC. 4. Any person desiring to practice dentistry in this state shall first submit to an examination before the State Board of Dental Examiners of this state, touching his or her qualifications, and every applicant for such examination shall, with his or her application for examination, submit to the said Board, as a prerequisite of such examination, a diploma of graduation of some reputable dental college recognized by the National Association of Dental Faculties. *Provided*, That all bona fide residents or citizens of this state who have been legally practising dentistry for at least one year prior to the time of the passage of this act, shall be exempt from the requirements of this act. *Provided, further*, That such person shall make affidavit to such lawful practice before a Notary Public, and present this affidavit to the Secretary of the State Board of Dental Examiners, together with five dollars for a license, within sixty days after the creation of said Board.

SEC. 5. Any and all persons possessing the diploma prescribed by Section 4 of this act, and upon the deposit of the examination fee, shall be examined by said Board, at such times and under such rules as said Board may prescribe, not inconsistent with this act, and upon the science of dentistry and dental surgery, and all who are found qualified shall be registered in a record book and shall receive a license from the said Board to practice dentistry in this state, in accordance with the provisions of this act.

### EXAMINATION FEE

SEC. 6. The examination fee in all cases shall be twenty-five dollars, to be paid to the Secretary of the said Board before such examination is had, and in no case shall the examination fee be refunded; but any person who shall so fail, shall, within one year, be entitled to re-examination without the payment of a further fee. Said Board by its Secretary shall keep a record book in which shall be recorded the names and addresses of all persons so examined, the date and result of such examination, names and dates of all applications, and such other matters as shall afford a full record of the same, which book, with such records or transcripts therefrom duly certified by the President and Secretary of said Board, with the common seal of the Board attached, shall be prima facie evidence before all the courts of this State of the entries therein contained. The said Board shall make and prescribe all reasonable rules for its government and for the conduct of its business.

# DENTAL ECONOMICS

## Success in a Small Town

By H. E. R.

Am much interested in the articles being printed each month in the Digest showing what the different dentists are doing over the U. S., and what they really are making, and whether they are saving anything for the time when they *must* take a *back seat*. Am giving my gross business expenses and collections for the first half of this year, and times are just as hard here as they are anywhere probably, for we have had two partial failures of crops when prices were high for farmers to grow the crops, and consequently they have borrowed all they can and haven't much surplus. So my business is just necessary work. I think my prices are moderate—Extractions \$1.50 and up, by local anesthesia; Silver fillings \$1.50 to \$3.00; Gold Crowns \$8.00 to \$10.00.

|                | Gross      | Collections | Expense  |
|----------------|------------|-------------|----------|
| January .....  | \$ 426.50  | \$ 426.50   | \$106.78 |
| February ..... | 397.50     | 377.50      | 108.63   |
| March .....    | 345.00     | 328.00      | 88.50    |
| April .....    | 423.00     | 390.00      | 110.35   |
| May .....      | 411.50     | 403.00      | 140.62   |
| June .....     | 472.00     | 445.00      | 116.64   |
|                | <hr/>      | <hr/>       | <hr/>    |
|                | \$2,475.50 | \$2,370.00  | \$671.52 |
|                | 671.52     |             |          |
|                | <hr/>      |             |          |
|                | \$1,803.98 |             |          |

This does not include expense of insurance or depreciation on outfit or furniture or fixtures—just instruments and material and laboratory bills. Now the point is that most dentists *do not know* what they are making or what they are losing, and it is absolutely necessary to get ahead. "Talk is cheap." It won't be necessary for me to say whether my riding is done in a Packard or a Ford. I've owned two cars. Have a Ritter-Grey Enameled Unit and very nice rooms, and find it pays. Expect to improve. Have only been in this town about

one year. Have practised dentistry 23 years. The first 13 years were practically lost, except for experience gained. Found myself after getting married and being brought face to face with many problems for twelve years, including sickness and going to College again, that I have been able to rear two good boys, one seven and one eleven, and have a very nice home, \$6,500.00, and 160-acre farm and other property which, when cleared (and I see my way to do it), will be worth enough to make us independent, and yet I feel that my best work will be done in the coming ten years. If this information is worth anything to a disheartened dentist I will be glad. If a dentist cannot clear \$300.00 a month something is wrong. If he does clear \$300.00 a month and can't save at least \$100.00 a month something is wrong, that is if he lives in a moderately small place. Dentists in cities are put to more expense in every way, and must get more money in order to save. My choice is a live town from 2,500 to 10,000. Be honest in every way and see that your patients are, and they will learn to respect you for it. It doesn't pay to be cheap. It doesn't pay to "skimp" in material. Make the patient pay for the extra amount or extra quality; they would rather do so if they knew they were going to lose by getting something cheap.

Of course, Life Insurance is necessary—old line preferred. Take the safe investments, and whenever a man offers you a chance to "get on the inside" and make 15, 30 or 50 per cent, show him the door or have the assistant do so if you have one.

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## What We Have Done to Economize

By a Dentist's Wife\*

Never in all the years of my husband's practice has so much gone on the books as there has during the last few months. Business has been good but collections poor. Hundreds and hundreds of dollars owing him, and much of it from people whom he classes as "good as gold."

Now what have we done to tide us over, keep us out of debt, and still keep the best foot forward, during this financial depression?

My husband certainly could not cut down in the office. Instead, he must keep up as well or better than ever before—people made to feel that he is still adhering to his high standard of work and equipment.

As a housewife and mother, I have always practiced economy, to the extent that I have helped my husband acquire a nice little nest egg of stocks and bonds. And it is one that we are determined not to touch if possible.

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\* Name known, but withheld by request. Inspired by Brother Bill's Letters.

Hubby was getting pretty blue and I was somewhat overcome with that depression that comes from straitened circumstances, when we decided to take stock of our expenditures.

"I can give up that good woman that irons and cleans for me every week," I suggested. "She charges thirty-five cents an hour."

"Never!" cried my better half emphatically. He knows that phase of housework spoils my disposition.

"Then it will have to be clothes," I concluded dolefully. My husband and I both go to good tailors in the city. We find that the right clothes give us assurance and confidence in ourselves and prove economical in the long run.

"No, I would never advise that," said my husband thoughtfully, "but the way things are the insurance and taxes are going to make us go some."

"What does it take to run the car?" I asked.

"Gas was sixteen dollars last month," he answered.

"We will sell the car," I said.

"But how can we get along?" said my husband, as if the car was one of the most vital things. It had been in a way. It kept us from walking.

We were one of the first families to have a car in town. We used one all the time and just for pleasure, and we were always buying something for it.

My husband sold the car. The price of the car we put away. To be explicit it went into a bond. And we are getting along beautifully. Of course we missed the car. There were times when we thought we would have to buy another one, but as my husband puts it, "we hung on to ourselves." We have all kinds of trips planned that we expect to take when we get our new one.

Now we are good hikers. At first we discovered that to strike a quick gait made us short of breath, which afforded our children much amusement. We keep off the pavement as much as possible and walk on old mother earth. Except Sundays we usually take our hikes right after breakfast and use up the better part of an hour.

The only fly in the ointment is to see others riding around burning up gas who owe us. Still that fly is not so very bothersome, for the feeling that we are not in debt makes us not only quite jubilant but secretly quite condescending.



## A Successful Dentist

By J. E. W.

I know a man named Judkins, who is principally a dentist, though he is partly an artist, a sculptor, machinist, carpenter, student, writer and, incidentally, a farmer. In other words, he is a handy man at nearly anything you can set before him.

Not that this is necessary to the making of a "successful dentist," though I am sure it helps; but that is the way Judkins is built.

About twenty-seven years ago when he was graduated as a dentist and opened his first modest office in an Eastern town, he adopted a rule which he had read about somewhere, to the effect that if a professional man would last well he should train his mind to forget his office and its problems the moment he left it, and not think of it again till next morning.

Having acquired this habit and found it good, he gradually came to apply it yet more broadly, i. e., to temporarily forget all save the thing in hand. In other words to *concentrate*. And right here let me say that Judkins attributes his success, or what little he modestly professes to have achieved, to that very principle. He believes in the "one thing at a time and that done well" theory, you see.

And so, as the years went by and he met his practical problems in dentistry, some of them bitter and disheartening of course, he stuck to each one till it was pretty well mastered; and he went always to his home at night care free, i. e., in so far as these ups and downs of his profession were concerned.

In the early years, too, he had enough troubles at home without taking along any from the office, for he was just newly married and had a husky and handsome young wife with a "mind of her own." You married fellows will know what that means. But Judkins didn't spoil her—and he and I both think that's another main reason of his success.

If he had humored her foolish whims and felt tragic over her jealousies, or had allowed her to dominate him, she wouldn't have been the splendid mother and loving wife she is today. And she knows it, and is proud of his grit and enduring determination. No "sissy men for me," she says.

Of course, Judkins is a good dentist; with the natural gifts and qualifications I have mentioned he couldn't be otherwise, could he? that is, if he had the one other most important qualification of *honesty* added. I believe no man can be truly successful in any profession unless he is honest.

Of course he can get a lot of money—sometimes it seems as though the dishonest ones get that the quickest—but all that stuff about "Be honest and you'll be poor" is rot!

The good old Bible says quite a number of worthwhile things that have been rather overlooked, and one of them is "As a man thinketh so is he"; therefore if the honest man wants to stay poor, why just let him think poverty and keep on thinking it. But Judkins didn't want to stay poor; and so he not only did good, honest, conscientious work, but demanded good honest pay for it—and got it.

The "get-rich-quick" schemes never appealed strongly to him, though he nibbled at a few tempting bits of "sucker bait"—just enough to show him the fallacy of trusting his capital to the other fellow's management.

Very early in the game he went in debt for a home of his own, and of course he saved up and paid for it. They nearly always do.

Later on when he decided to move to California he not only sold this home, but his practice as well, at a good big price, because with his industry and ingenuity he had fixed things up so that *somebody wanted them* badly enough to pay what he asked.

Well, that experience confirmed him in the belief that realty investments were pretty safe and sure; and so in the "land of sunshine and flowers" he did the same thing again, and yet again, always doubling or nearly doubling his money; and at the same time living well and in the main happily. For Judkins thinks the secret of happiness lies in being productively busy, and he was always that.

"This is a busy universe," he says. "Something doing every minute in Nature, and the only way to be truly in tune with the Infinite (or with Nature) is to get busy ourselves."

Eventually he moved to and acquired a good practice in a big city, partly because fees are better there, and partly because he likes to associate with other dentists in the Society meetings.

He says "dentists are a fine bunch of fellows as they run," and he likes to "see their eyes shine with welcome and feel their cordial hand clasps as he greets them before and after sessions."

Besides this he always "learns something of value" he says, whenever and wherever he attends.

But while cities have these and other advantages, he found one thing about them that is very bad, a thing that a good many apparently haven't yet noticed—he found that they were mighty poor places to bring up a family.

He tried it with his first boy—and nearly ruined him. And then he decided that something must be done, because to fail here would be the greatest failure of all.

So he and the good mother talked it over and decided on a farm where the boys could let off steam in a more normal and beneficial way than in raising the devil around town. The result is that the three younger kids—all boys—are, after three years of farm life, quite wonderful.

One is 16, the next 12, and the youngest 8, and they, together with their dad, are doing practically all the work on 30 acres of the richest valley land in California, ten acres in bearing orchard and the rest in beans or other paying crops.

And yet these boys are top-notchers in their school work as well. Judkins says they are "too busy to get into much mischief!" And he is wise enough to keep them happy and contented by giving them their part of the money they all earn together.

When they sell their beans or fruit or a bunch of hogs, each boy gets a liberal percentage of the total receipts, and they are hoarding this away in bank accounts against the day they go to college. For Judkins is bringing them up with the idea that they must *pay their own way in the world*, and be proud and glad to do it.

They are alert, energetic, wide-awake and as interested in tractors, farm implements and animals as most city kids are in "joy rides" and "jazzy" dances. Speaking of dances, Judkins and his wife are both graceful and accomplished dancers, and are well versed in the arts and graces of "good society," yet they gladly forego most of that sort of thing in favor of the deeper joys of country living.

As for the dental practice, it doesn't seem to suffer in spite of the doctor's independence and his all-day holiday every Saturday, besides an extra day or two occasionally when there is a crop to harvest or a big field to irrigate. His patients treat him most kindly and tolerantly, and most of them commend his course heartily, although some openly envy him his freedom and independence.

Ordinarily he is a "commuter," but quite often drives over the beautiful boulevards of Southern California to and from his office "enjoying," as he says, "every moment of it, because God's world is a world of wonderful beauty manifested everywhere, if people would only open their eyes to see it." He does see it all right, and his boys are growing up to be as keen beauty lovers as their dad.

Another of the doctor's contentions is, that nothing seems right in the world when one lacks health; and so he insists on moderation in all things—eating especially, and in a due amount of recreation for himself and all his family.

The annual vacation is religiously observed. No question as to whether it can be afforded or not, or to whether it might result in loss of business. "To Halifax with business!" says the doctor. "When I work, I work, and when playtime comes I'm going to play."

Every year this wise dentist gets nearer to Nature's heart, because he goes back farther and farther into the deep forests and high mountains, bringing back deer horns, bear hides and other trophies, as well as artistic sketches and photos; and best of all, robust health.

This year his 16-year old son is to accompany him, for the doctor

has trained him so carefully that he is not only a dead shot with rifle or shot gun, but what is still more important, a most steady, cautious and reliable sportsman and companion.

He can cook a splendid meal, wash dishes and clothes, drive an auto with steadiness and care, and repair it or its tires as skilfully as most men; and he never kills wantonly or cruelly, obeys the laws and preserves nature undefiled. Now don't you see why I say Judkins is a "successful dentist?"

In the first place he's a real man; in the second place he's rearing a family that is bound to be of benefit to humanity in general as well as to the boys themselves, and a comfort to this worthy couple in their old age; in the third place he has accumulated considerable property—some fifty thousand, perhaps—and is rapidly acquiring more; in the fourth place he has always ranked and does still rank as the best or as good as the best dentist in his community, because he loves his work and fights stubbornly against the almost universal tendency to grow "slack" as the years roll by.

He keeps up-to-date most conservatively, i. e., nothing new escapes him though he doesn't adopt every fad that comes along, and incidentally this fact may account for some of his accumulation of property. Finally he is kind hearted and charitable to those who don't ask it; gentle and patient with all, entertaining and gentlemanly, but never "fresh," no matter what the provocation.

"Personally I think all these things make for real success," says Judkins. "It doesn't seem to me that success in any one thing is an ideal at all. If one doesn't appreciate God's universe well enough to look around and see it, and to treat it and its creatures rightly—including his own precious body—doesn't develop his talents properly, treat his neighbors kindly, and do his full share all along the line, I don't think he deserves to be called a *successful* man. And I don't think he will be, at the end of the next generation either."

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## The Urge to "Move"

By Jorge A. Camara, Dominican Republic

I have never before attempted to write an article for the press, but having seen in THE DIGEST the articles about "Failure in the City, Success in the Country," am herewith submitting my experience in the hope that some of your readers may benefit from it.

I am thirty, married and with two kids. Practiced happily, but was not satisfied at my home town with an average of five thousand a year. My bank account was not any too fat. Saving was very difficult on account of the high cost of living in a city, and always kept me

guessing how to do it practically and efficiently. Have been practicing over eight years and am just beginning the "rainy day account."

A few months ago a dentist friend of mine from this country induced me to make a change and locate here (Dominican Republic). "Living expenses excessively low. No place to spend money. Work and save was all that could be done. Nice healthy surroundings, beautiful scenery. Hunting and fishing a-plenty. Work, all I could possibly do, and with high prices. Easily could make twelve or fourteen thousand a year and save most of it, too. Nothing short of a paradise, I assure you."

After listening to this charming description over and over again, I made up my mind to change. Blessed change, too! Arrived at a slow farming town of about eight thousand inhabitants. Dead slow and going through the worst crisis of its history. Three months' work netted me under six hundred dollars. Have merely existed all this time, guessing and worrying about what is the best thing to do. I am up against it. Can't return home because the trip costs nearly a thousand dollars, and I am really ashamed to admit defeat and can't stay much longer, when I am only just making enough for my board and expenses and have notes to be paid soon.

To add to my misfortunes my office has been ruined. Chair, sterilizer, engine, bracket and cuspidor were so badly smashed that they are almost unfit to use. Of course this is nobody's fault. I bought a hundred dollars worth of lumber and had two carpenters working for over a week making close-fitting cases for all, and yet everything got smashed. Maybe you move all around the United States without a single glass breaking, but I was unlucky in this respect.

If any one of your readers intends moving I would advise him to take heed of my sad experience and don't commit the same blunder.

If you are not satisfied where you are it is nobody's fault but your own. Don't kick about the place, but kick yourself. New York or Newburg, Frisco or Terre Haute is the best place on earth for you to work and succeed after you have been there for a while. Take my advice, stick wherever you are and improve, improve, and improve. Improve your office, your methods, your looks, your hands, your prices.

Our profession has received a great boom on account of the war. Ex-soldiers attend to their mouths a whole lot more than they used to before the war. They care about the teeth of their wives and children as they never did before. They appreciate good dentistry and are willing to pay for it.

So deliver the goods wherever you are. Be honest to yourself and to your patient. Success will invariably reach you. Remember that the gold mania got me in a hole and deep into it, too.

## PRACTICAL HINTS

This department is in charge of Dr. V. C. Smedley, 604 California Bldg., Denver, Colo. To avoid unnecessary delay, Hints, Questions and Answers should be sent direct to him.

### *Editor Practical Hints:*

Will you please give me the technique of vulcanizing with glycerin?  
W. G. M.

ANSWER.—I am not familiar with the process of vulcanizing in glycerin, but will publish your question and perhaps some other reader can enlighten us both.—V. C. S.

### *Editor Practical Hints:*

Through the DENTAL DIGEST will you kindly answer the following question: How prepare deep seated gingival cavities for a very highly nervous patient without the use of nitrous oxide?

ANSWER.—There are several ways of producing local anesthesia satisfactorily. One of the simplest and best methods is the interosseous injection of novocain solution. With a hypodermic needle inject a little of the solution in the soft tissue over the interdental space close to the apex of the root of the tooth upon which you wish to operate. Remove the needle and with a Twist Reamer a little smaller than the needle penetrate the Alveolar plate. Insert the needle point into this hole and inject a few drops of the solution into the cancellous bone. Usually the desensitization will be complete in a few moments.—V. C. S.

### *Editor Practical Hints:*

I have a patient with very tender lower gums. Have used fine Para rubber as base for plate. Relined plate once from a closed mouth impression, using quite soft plaster with light pressure. Mouth keeps sore. Can you suggest some remedy or different material in your next issue of the DENTAL DIGEST?

F. E. S.

ANSWER.—If you could take a good Tench Modeling Compound Impression and carry the rebasing technic through carefully, I believe your difficulty would be largely remedied. Occlusal stress has a very

important bearing on this case also, and you should be sure that there is not a sliding stress on the lower because of the occlusion. I think there is an occasional mouth that does not take kindly to rubber, and if comfort cannot be secured through the above a metal base might solve it, preferably gold, though aluminum may be used. I do not approve of the heavy bases.—V. C. S.

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*Editor Practical Hints:*

Perhaps you can give me or tell me where I can get good practical, not theoretical, information on gold inlays.

What is the reason so many of my inlays are almost perfect fits, but almost always lacking at some margin? Is this mainly due to expansion of gold? And can this expansion be remedied without the use of highly expensive scientific apparatus?

R. K. H.

ANSWER.—The most frequent cause of imperfect or imperfectly fitting margins of inlays is due, I believe, to a faulty wax pattern. Wax has such a tendency to contract and warp in cooling that frequently a pattern which to the eye appears to be a perfect replica of the cavity may prove to be quite at fault when carried to the inlay stage. The type of machine does not matter so much if you get complete castings without rough fins or rough surfaces on your inlays due to excessive pressure. The proper way to make a wax pattern is to use an excess of wax of wedge or conical shape, so that point when softened will reach to base of cavity while the body of the wedge is hard to act as a plunger in forcing the softened wax to place in the cavity and against all of the margins. It should be held under firm pressure for at least a minute after insertion. This prevents the wax drawing up away from the margins during cooling and contracting period. It should now be trimmed carefully to the tooth outline cutting from the wax toward the tooth and if any defect is detected the wax may be molded and burnished toward the margin with a hot spatula. If such a pattern is invested immediately after removal from the cavity I believe you will find that your difficulty has been corrected, especially if you cast your inlays in cold molds and of pure gold which permits slight burnishing of the margins at time of setting. The expansion and contraction of gold is of small consequence and does not result in warpage with open margins as you describe.—V. C. S.

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*Editor Practical Hints:*

I have a patient whose teeth between the wisdom tooth and the first bicuspid on the lower right side have been extracted.

The second bicuspid on the left side is the only one that has been extracted.

Do you think that to put a bridge on the right side would be too long a span?

Would a partial plate, with a lingual bar and gold clasps, putting in a bicuspid on left side, be satisfactory?

H. M. F.

ANSWER.—I certainly do think that from third molar to first bicuspid is too long a span for any-fixed bridge. A Unilateral Removable Bridge might be placed advantageously, if the abutment teeth are strong and the bite not too long, by providing a well-fitted saddle, with carefully made cast clasps on the molar and first bicuspid, the latter carrying an extension in the form of a lingual rest or wing resting against the lingual surface of the cuspid. A lingual bar with clasps on the first bicuspid and first molar with second bicuspid dummy on the left side would certainly add to the stability of the right side and make an entirely satisfactory fixture, in case you are sufficiently skilful in this technic to make such a case that will seat without difficulty and without spring or strain upon any of the abutment teeth.—V. C. S.

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*Editor Practical Hints:*

In regard to Dr. Secor's case of 24K. inlays and gold fillings turning dark, would suggest that he look about for copper amalgam fillings.

I have found a copper amalgam filling to discolor gold crowns at quite a distance.

S. S. KLEIN, D.D.S.

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*Editor Practical Hints:*

I recently made two upper plates for different patients and after wearing them for a month or two they have gotten loose. When I put them in they were very tight and worked nicely. Could there be anything in the way I made the plate, or is it just plain absorption? One patient has had a plate a year but it was not satisfactory and I made a new one. The other patient is not in very good health and I thought that might have something to do with it.

I would like to have your view on the matter as to what is the use of making a good plate and have to make it over in a month or two?

H. W. L.

ANSWER.—Over compression of the peripheral border of a plate with consequent interference with free circulation of the blood in the tissue will frequently result in very rapid absorption. It is well for this reason to not only avoid excessive pressure on the peripheral border but to scrape the impression for relief over the two posterior and the anterior foramina, thus avoiding pressure upon both the nerve trunks and the blood supply to the mouth.

An unbalanced occlusion is another frequent cause of plates loosening up and acquiring the tipping habit. If the anterior teeth are too long or any cusp of any tooth is sufficiently long to strike without balancing contact elsewhere, the patient may acquire the habit of biting on this lever and throwing the plate loose—V. C. S.

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*Editor Practical Hints:*

Can you or any reader of the DENTAL DIGEST give me a remedy for a case I have—a young boy, age 7, who sucks his tongue when sleeping?

It is causing a mal-occlusion of the upper centrals, and I don't know how to stop him of this habit. Someone please help me out.—A. J. S.

ANSWER.—I do not know of any appliance intended especially for this purpose, but believe a vulcanite appliance similar to one that I made to prevent a man from talking in his sleep would serve the purpose. This consisted of a thin vulcanite plate fitted with a projection extending downward, back of the front teeth, and fitted into the floor of the mouth in front of the tongue. This appliance may be made with straight vulcanite or it could be held securely in place by embrasure hook round wire clasps in the bicuspid region. This prevented the sleep talking, and I feel sure it would also prevent tongue sucking.

V. C. S.



## CORRESPONDENCE

Pau, France.

*Editor of DENTAL DIGEST:*

I have been reading with great interest your articles on Dental Economics published in the DENTAL DIGEST. I must say that your advice and all those who have been writing on this subject in your magazine, have greatly helped me to improve my working methods.

Before the war I was in the habit, like most of my colleagues, to overstrain myself, my waiting room being always full of clients, yet my profits were inadequate.

On my return from the war I altered all my previous methods. Now I have two up-to-date operating rooms, fitted with two Ritter outfits; a waiting room, an office and a laboratory with a complete modern outfit, and an experienced mechanician. I have an assistant, and I value highly the advantages obtained through his collaboration to facilitate my work, and in saving my time and avoiding useless delays.



The Pyrenees. A picture taken from Pau, France.

I only receive my clients on fixed appointments, and never more than twelve daily; this allows me sufficient time to read and study modern Dental Technics, which I apply in a most beneficial way to my clients. I do not possess an X-ray outfit, but there is in town a good specialist, and I very often resort to this mode of diagnosing.

My plates are made according to the methods of Professors Gysi and Williams, and are worked with Anatoform teeth. I have a complete Fripp outfit for my impressions, and all my gold plates and bridges are cast with an Elgin machine.

I lecture my clients on all the progress made in dentistry, which

they easily understand, and they agree to pay me decent fees in return for my scientific work.

I work from 9 to 12 and from 2 to 5 P. M., and on every Friday afternoon I attend gratuitously to the poor. I close my office every Saturday at 12 o'clock until Monday morning, and I enjoy a month's holiday every year. I fulfil my social duty towards my staff, by allowing them decent salaries and a share in my profits.

I am thirty-one years old, am married, and am expecting soon my second child. I hate outside amusements, and I spend all my leisure time with my family, and to advancing professional interest in dental societies.

I am living in the lodging over my office, pending the reduction in the cost of building. I have made my home as comfortable as possible; I possess some fine antiques, which give a fine artistic touch to my home.

I have made everything by my own efforts; I started in 1911 without a penny, and what I have earned is the result of my application to business. I possess now a life insurance, and save monthly about 1,000 francs, sometimes a little more.

In our profession it is rather difficult to make a fortune, but I think that I have obtained a success in dentistry; that is why I have thought proper to acquaint you with the results I have secured. Every dentist who will follow the advice given in the *DENTAL DIGEST* will certainly derive much profit, both financially and ethically.

Being a great admirer of my profession, I will beg leave to suggest, before closing my letter, that a token of gratitude be paid to those who have helped in the development of our Art. It would certainly be very interesting if the *DENTAL DIGEST* should undertake the reproduction of the portraits of all the dental celebrities, to begin from the ancient ones down to our days, whatever the nationality may be, as Science has no native land but belongs to Humanity.

I have carefully kept pictures of Dr. Gysi and Dr. Snow, already reproduced in your magazine; it will be easy to have them framed and placed in our operating room; we would then work under their eyes and be inspired in our professional efforts, while from the bottom of our heart would rise a prayer of gratitude to our skilful predecessors, who have so highly contributed to the development of Odontology.

Kindly excuse me, dear Editor, for my long letter, in which I have tried to explain to my American friends what a young French colleague thinks of Modern Dentistry.

E. BENOIST.

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*Editor DENTAL DIGEST:*

In the August number of *DENTAL DIGEST* a subscriber claims to be refused admission to membership in his State Dental Society on

account of once having been employed in an advertising office and asks for suggestions regarding same.

Will prefix my remarks by saying that I am a member of my State and District Society, also the National Dental Association.

I've made up Programs for my District Society (which meets semi-annually) for the past two years, and with my neighbor dentist (only two of us in our town) entertained the District Society in 1920.

Personally, I gain a lot of real practical good from my District Society; in fact, more than from the State Conventions (possibly my capacity for absorbing ideas in the State Conventions is not so large), but of course I like to and do attend as often as convenient.

I've never attended but one National Convention, due to inaccessibility, but I certainly look forward to my National Dental Journal, which carries the proceedings of the National Conventions; however, I don't find the "maneuverings" of the National Association applicable to "a small town practice."

Some twelve years ago I was financially embarrassed, and found a way out of it by securing employment in an advertising office for about six months. Upon doing this I immediately requested a withdrawal of membership from the Society, same being granted.

After getting a little better settled, I returned to my private practice, renewed my membership, and have been a regular member ever since.

I've learned that Professional Ethics is not measured by the distance of sound, although "A Big Horn" will apparently put some things over on a Convention floor which will result in disgusting some good conscientious men, and they naturally pass up the next meetings.

My interpretation of Dental Societies is, in part, to encourage professional social co-operation, thereby lifting the standard of dentistry towards the high plane to which it so rightly belongs. That, surely, can't be done by some disgruntled Membership Committee representing a Society.

I would suggest placing your application in person at your next State meeting, go before the Membership Committee with all the facts, and leave nothing covered.

In my opinion your Society has the facts regarding you misquoted to them, or else the wrong men are serving on the Committee.

After you have presented the facts, supported by your neighbor dentist (who happens to be a member of the Society), then if they deny you admittance you should tell them to go where snow is unknown, and go on with your practice serving your followers the best your skill will permit, forgetting there ever was such a "Klan" who sees fit to leave you out in the cold.


F. L. H.

## Dental Secretaries, Hygienists and Assistants

### Methods I Have Found Valuable in the Conduct of a Dental Office

By Constance Longcor, Newton, New Jersey

#### SECOND PRIZE ESSAY\*

 HE fact that the average dental assistant in an office in the country has under her entire supervision the receiving of patients, the making of examinations, the arranging of appointments, the general assisting at the operating chair, perhaps a good deal of the laboratory work, the desk work and keeping of accounts, the ordering of office supplies and last, but certainly not least in this day and generation when to get anything done you must do it yourself, the care of the office itself, should make the assistant as indispensable to the dentist as his instruments would be to his operations.

The points to be brought out in this article can perhaps be more easily summed up by enlarging upon each of the previously mentioned duties of the dental assistant.

Of course, one's natural intelligence would help to distinguish the difference between an appointment book and a bin-angle chisel, even on the first day of one's career as an assistant, but there are a hundred and one other things less distantly related that are sure to cause a certain amount of misgiving on the part of the dentist and his assistant, the first few weeks that you begin your work. Especially so if, like the writer, you, a little past sixteen, walk out of high school to the office of a local dentist and expect him to hang your diploma in his waiting-room while you learn the profession (?) to take the place of his present assistant who has been with him for the past ten years and is leaving in a few months. However, that was nearly six years ago and for my mental comfort as well as my secretarial dignity I have forgotten most of the worst mistakes I made. To recall them would perhaps be too much like "a face from home" to other assistants and surely a

\* The names of the winners in the Prize Essay Contest for Dental Secretaries and Assistants were published in the October issue of the DENTAL DIGEST. The winner of the Second Prize has withdrawn from the contest. As she has returned the check sent to her, the Second Prize now goes to Miss Constance Longcor of Newton, N. J., and the Third Prize to Miss Juliette A. Southard of New York City.

damper on the enthusiasm of those who may be planning to take up such work.

There are often several dental offices located in one country town, and one soon comes to recognize most of the town people, to say nothing of those people from the out-of-town districts. In this way we find that the Smiths, who are patients of ours, and who live next door to the Smiths who are patients of another local dentist, are usually responsible for the fact that there is always a kindly professional feeling between the family dentists. However, whether it is a Smith or someone with an equally lengthy lineage, a pleasant word of greeting as you meet him in the waiting room, and a diplomatic arrangement of the business-like words "What can I do for you?" will begin your day's work. The diplomatic part comes in, when a patient walks into the waiting-room looking like the proverbial "bustin' up of a hard winter" as evidenced by a one-sided facial expression and you ask him, "Something I can do for you this morning?" If he doesn't say "Oh, no, I just came in to read the morning paper," ten chances to one he feels like it.

Any little courtesy shown the patient while he is in the waiting-room is usually appreciated, even if he doesn't acknowledge it. If he has an appointment with the doctor, after telling him the doctor will see him in a few minutes or words to that effect, to a person whom you know, you can sometimes suggest something of interest from a magazine on the reading table, or the rearrangement of a chair to afford a better light may add to the comfort of someone waiting. And a lady will always be grateful for the suggestion that she may go in the next room to adjust her wraps if she wishes.

If the patient requires only an examination he need spend but a short time in the office. The examination chart, near at hand while you are examining the teeth, should be marked for the convenience of the doctor and then the appointments can be arranged. It is, of course, merely showing appreciation of the patient's time as well as considering the dentist's time to ask if the morning or afternoon will be more convenient to him for his appointment. Usually the time is very well evened up and the patient is grateful for your having considered him. To avoid any mistakes when an appointment is made over the telephone, it is well to always mail a card to the patient giving on it the date and the hour you are holding for him on your appointment book; then he has the card to go by rather than what he heard over the telephone.

That part of your day when you are assisting at the chair ought to prove the existence of P's and Q's and the necessity of minding them. The operating chair and swing table should always be ready for the doctor to begin work on the next patient immediately upon the dismissal of his first one. The use of a whiskbroom over the chair and the placing of a fresh linen-piece on the head rest makes the chair ready. The

swing-table should have no other instrument on it at the time the doctor comes to his chair but the mouth mirror, tweezers and a pair of explorers. And then, of course, the usual arrangement of cotton-holder, cotton-waste receiver and Bunsen burner. The use of paper table-pads makes it easy to keep the swing-table neat and clean for they can be removed quickly, a fresh one placed and the table arranged before the patient comes in from the waiting room and then taking a moment to put those instruments to be sterilized in the laboratory, you are back at the chair in time to tie a towel on the patient while the doctor is washing his hands and preparing for the work. A drawer in the operating-cabinet should be kept supplied with fresh towels, and one need only reach from chair to cabinet and the patient is ready for the doctor. A glass of warm water placed on the cabinet within easy reach is always handy for the doctor's use in syringing the mouth during operating, and needless to say the warm water is much more comfortable to a sensitive tooth. All the instruments for the different kinds of fillings are more easily collected if kept in groups of the particular kind of filling material they are to be used with and can be quickly taken from the drawer and placed on the swing-table when the doctor tells you he is ready to make a filling. A special place for chip-blowers, cotton-rolls and filling-material slabs can be made in the cabinet where when not in use they are out of sight and still easily reached when needed. One needs something in the form of a napkin for wiping instruments on and by using paper napkins one napkin can be cut in four and still be large enough for the purpose. This paper is very absorbent too. All instruments after having been brushed with water in the laboratory to remove any foreign particles should be brought to the sterilizer which usually appears well placed near the operating chair.

When the doctor dismisses his patient it is usually best to mark up the chart of the work done before the work for the next one is begun, for it is often difficult to recall the position of fillings made after several patients have been receiving attention. By the end of the day the charts will be all marked and ready to be copied on the ledger pages of each patient. In this way the accounts can be easily referred to and always before you when rendering statements at regular intervals.

Usually the dental depot from which you purchase most of your office supplies sends out a salesman every two or three weeks, and this saves placing a number of orders, for a large one can be made up and ready for him when he calls. It is often a convenience to inquire about dental goods before ordering and the salesman can be of assistance in this way. And then it should be considered well worth your time to talk with a twentieth century salesman and learn why, for instance, burs cost three times what they did four years or so ago and not learn why the dentist isn't paid for having to use the miserable things.

And to come to the last of a dental assistant's duties. It seems that a broom and duster are looked upon as things to keep away from (like some contagious disease), judging from the way most of them are shunned. So when it is impossible to get someone to come in and clean the offices, you just attend to it yourself. Well, one soon takes pride even in doing that, and a neat arrangement of the books and magazines on the reading-table makes the waiting room more inviting and in season a few flowers placed here and there make the offices a bit more attractive. However, the voice of Experience warns one against leaving the doctor without an assistant for a couple of weeks, while recovering from ivy poisoning gotten in the efforts to have floral decorations for the office.

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## What Is a Dental Secretary?

By Juliette A. Southard, New York

Next to the Dentist the Dental Secretary is the most important personage in any dental office.

She is the Dental Office Manager.

It is she who cares for the detail and who always keeps her eyes and ears open.

It is she who supervises the arrangement of the office to make the best appearance, and directs the battle against disorder, dust and cobwebs.

It is she who receives the patients and dismisses them. Who makes all appointments and collects the cash.

It is she who soothes the nervous patients, calms the obstreperous ones and stills the telephone bell.

It is she who interviews all callers and stands between the dentist and gold brick peddlers, promoters and stock salesmen.

It is she who sees to it that all "smelly" bottles of medicaments are kept under cover, and dirty linen out of sight.

It is she who knows how to mix cements and amalgam, sterilize instruments, etc., take X-rays and develop them and fill all gaps in service whenever needed.

It is she who follows up the laboratory work, and sees that it is on time and that the dental supplies are always on hand when needed.

It is she who opens the mail, registers the complaints, and writes diplomatic replies.

It is she who takes care of the records, keeps the accounts straight and takes the trial balances.

It is she who plans the daily schedule, prevents waste of time and thereby increases the dentist's income at least a hundred per cent.

It is she who is the official hitching post, to which all kicks are tied, thereby saving the dentist many unpleasant explanations and much worry.

It is she who at all times is loyal and discreet and safeguards the interests of the dentist.

It is she who is always tactful, cheerful and smiling. God bless her.

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## From the Assistant's Point of View

By Beatrice W. Parvin, D.A., Bradentown, Fla.

This article by a secretary-assistant is well worth reading for the suggestions it contains for dentists. If you employ an assistant, or expect to, it may prove very helpful to know how one assistant views her position.—(Editor)

It seems that practically all the articles written about Dental Assistants, are written by the dentist, and from his point of view. The poor assistant is much discussed, and much advised, but with never a word to the dentist himself as to his duties to her. From my vast experience of two years with the same dentist, I feel it necessary to take up arms in defense of our part of the profession.

Mr. Dentist, who has so much trouble with girls who take no interest in their work, etc., did you ever try explaining to the girl some of the things you are doing, and some of the whys and wherefores of what she is expected to do?

It is natural that only girls who have an inclination toward a nurse's work would really want to be assistants to dentists. If they understand that the term does not imply a position enabling them to stay in the reception room and read, or answer the phone, or make out statements only, the girls who are looking for a soft snap will decide that their paths lie in other directions.

When a girl first learns of the many duties lying before her she is inclined to feel bewildered, especially if this happens to be her first venture into the professional world. She probably has no more conception of how interesting dentistry really is than the patient who comes to your office only when she has to have her teeth cared for. She can easily understand that cleanliness is a prime essential in a dental office, and feels entirely in her element as she devotes her time to sterilizing and keeping things neat and clean, for she knows that the last patient in the afternoon is entitled to find everything as spotless as the first patient in the morning.

Right here is where the dentist's opportunity comes, for as he finds she has grasped the simpler things it is up to him to open her eyes and broaden her vision.

I can only tell you the method used by one dentist to accomplish this. After his assistant had learned to do the routine things efficiently, he would talk to her of the various kinds of fillings, and show her the difference in the instruments required for each kind. Of course she was interested, but couldn't remember when the time came for him to put in a gold filling, which were the proper instruments for that particular one, and she had to put out all his gold fillers, regardless of the size of the cavity, etc. And after he had been using hoes, chisels, explorers and excavators, she did have such a time separating them after sterilization, to put back in their proper places. He very kindly allowed her to stand beside the patient and watch him perform the operation, when he knew it was one who would have no objection. At first she watched him put in amalgam fillings until she became familiar not only with the various instruments required, but also with the amount of mercury and alloy he used for the various sized fillings. It was easy for her to see how much time she was saving him and the saying "Time is Money" must have originated in a dental office.

A dentist should never be afraid to give his assistant an honest word of commendation, for it encourages wonderfully to know your employer appreciates your efforts. It should never be necessary for a dental assistant to ask for a "raise," for the dignity of her profession is much impaired if her employer doesn't recognize it enough to give her proper compensation.

As the young lady grew capable of absorbing more information, the dentist would casually mention some interesting article in a current dental magazine which was not too technical for her to grasp. Those on oral hygiene are fine for assistants to read. He would often ask if she had read a certain article, or if she would please find what a certain authority had to say on a subject. In order to answer his questions and to carry on an intelligent conversation with him she had to read carefully. He bought the late books for her which were on the subject of dental hygiene—not telling her they were for her, but calling her attention to the advertisements, and asking her opinion; then when they came they were always lying around conveniently near. He told her she was perfectly welcome to take them home at any time to read. How wonderful is the power of suggestion!

How could one help becoming interested in her work when she saw the possibilities before her—the service to humanity—and when she felt the honor of having even a small part in making the world a better place to live in! How much the dentist's own attitude toward his profession has to do with his assistant's attitude toward her work. Do you feel that you are only working for the money you may be able to get? Then do not be surprised if your assistant has her thoughts principally on the pay envelope! Do you feel that you are a member

of an honored profession, and as such are going to give of your best to your patients? Then you may expect that your assistant is going to give her best to you.

And now, Mr. Dentist, I humbly beseech, in the name of our splendid army of dental assistants, that you treat us as if we had ordinary intelligence, and you, expecting great things from us, may be surprised by receiving of our best. Be the kind of employer that will make every girl wish she were your assistant.



# DIETETICS and HEALTH

## Food Minerals

"Pure blood" is a subject more talked about but less *thought* about than any other combination of words except, perhaps, "God and eternity."

If the body didn't get rid of its carbonic acid and other waste products which are taken up by the blood, death would result within a few hours. A jug of cider in process of fermentation is seen to bubble at the mouth until all its sugar has been converted into alcohol and carbonic acid, better known as carbon dioxide. As long as the bubbles continue to come to the surface carbonic acid is being manufactured.

As long as life remains in the human body (says Alfred W. McCann in N. Y. Globe) the same carbonic acid is being formed and must be got rid of quickly.

At least one of the food minerals is actively and directly engaged in ridding the body of the poison of carbonic acid. This mineral is sodium. Its activity in the body merely serves to reveal the remarkable conduct of all the other minerals as they perform their various complex tasks in fortifying the human organism against disease and in repairing damage to the human tissues.

If you would see sodium at work go to any laboratory and eat a tablet of citrate of lithium. Take a clean platinum wire, hold it over a blue Bunson flame. The platinum will contribute no color to the fire.

Pass the platinum wire along the skin of the forehead or across the palm. Return it to the flame and note the beautiful yellow fire of sodium, showing this mineral at work in the elimination processes of the body.

Without sodium to take up the carbonic acid evolved as a waste product through the combustion of sugars and starches, alcohols and oils, this poisonous waste would accumulate in the blood stream, saturate the tissues and destroy life. This is one of the reasons why the excessive use of denatured sugars and syrups and starches in the diet of Americans is followed by so many serious complications leading to specific diseases that are given various fanciful names, although originating from one and the same cause.

Sodium is but a single one of the food minerals indispensable to

health. The platinum wire and the Bunson flame have revealed it at work in the performance of but a single one of its numerous functions.

Now take a blue glass which will filter out some of the light rays that would otherwise interfere with vision. Look through it at the platinum wire in the flame. Note the beautiful lilac fire of potassium, showing this mineral also in the elimination processes of the body. The sodium and potassium have actually been taken up from the human skin and are disclosing themselves in the Bunson flame.

Potassium helps to keep the tissues flexible and active while assisting the sodium to carry off the carbonic acid manufactured as one of the waste products of combustion in the furnaces of life.

We will assume that you have now allowed a half hour to elapse since eating the tablet of citrate of lithium. You clean the platinum wire thoroughly so that it no longer shows the coloration of sodium or potassium in the flame. Again you pass it over the forehead, across the palm of the hand or under the arm. Again you place it in the flame, which now is colored a vivid red. This is the flame of lithium. In one short half hour the lithium, taken through the mouth, has circulated through all the avenues, highways and by-ways of the human body and has appeared, after its marvelous journey, upon the surface of the skin.

Of course it has gone into the internal secretions, also, but we are not now talking of them, or of the food minerals without which they could not exist.

Through our experiments thus far we have merely obtained a crude and perhaps a gross idea of some of the hidden forces at work in the human structure during life. A refinement of this idea adequately covering the whole truth is perhaps reserved for the pure intelligence of angels, but even men with darkened understandings, muffled down by the flesh, can grasp something of the exquisite mystery thus coarsely hinted at.

There is abundant evidence to prove that potassium engages in the life of the nervous system and assists the heart to beat by influencing the relaxibility of the heart muscles. If the heart did not pump the blood into the lungs of the body through its rhythmical contractions and relaxations the body could not and would not obtain the oxygen necessary to the support of life, nor could it through its delicate tissues, made up of millions of little valves or filters, dispose of the waste gases, which would otherwise poison all its organs and glands.

Many discoveries of science support the conclusions that potassium (not in the poisonous form in which it appears in medicine, but in the benevolent and highly organized form in which it appears in food) interferes with the hardening influences that menace muscle, joint and artery, keeping the tissues soft and pliable, and entering into the phenomenon described as "tissue-tone."

Even in plant life it has been noted that linen produced from flax grown on granite soil, rich in potassium, is noted for its suppleness and softness, whereas linen produced from flax grown on calcareous soil is hard, brittle and of little strength.

The farmer has been taught through various federal and state bulletins to appreciate the necessity of potassium to the health and vigor of plants, yet school children, misled by a crazy vitamine agitation, are never taught that when the body is unable to secure the normal natural abundance of mineral salts and colloids found in unrefined foods, the wonderfully complex duties which have been assigned by Mother Nature to these minerals either remain half discharged or are not discharged at all, so that the result of the disorder is expressed either in sickness or death.

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## One Hundred Years Ago

(From the Union of November 2, 1821)

### INCORRUPTIBLE TEETH

Mr. Plantou, Surgeon Dentist, from Paris, No. 110 S. 4th St., corner of Prune, Philadelphia. The only Dentist in the city who possesses the art of making incorruptible teeth so well known for being preferable to all those taken from dead bodies; these not being subject to corruption, to alter their color, nor to contract bad smell; it is by those great advantages that all the scientific men in Europe, as well as in this country, give preference to that kind of composition which by never decaying itself prevents the decay of the remaining teeth, which are always injured by all the other kinds of artificial teeth.

Mr. Plantou practises all the operations of his profession at a reasonable charge.

Mrs. Plantou continues to take likenesses in oil and miniature. She has opened her academy to teach ladies the art of drawing.

# DENTAL LABORATORIES

## Laboratory Co-operation

By Charles N. Reese, D.D.S., Chicago

The practice of dentistry requires and develops the utmost precision in order to fulfil its complete obligation to the patient.

In the old days when every dentist performed his own laboratory work it was easy to correct or overcome small inaccuracies in taking bites or impressions, but since every phase of the profession has become highly specialized, the laboratory work particularly has become a separate and distinct professional service for the ethical practising dentist, and it is of the utmost importance that information and instructions to your laboratory be given very accurately and explicitly.

At first thought it would seem unnecessary to remind a dentist whose very reputation is at stake on every case he undertakes, to be careful in taking bites and impressions or making models, and to be explicit in giving instructions to his laboratory, and yet, if you could look over some of the cases that are presented you would be astonished to learn how careless some professional men become in handling these important matters.

Since the value of constructed pieces of any class depends upon the accuracy of the various stages through which they have passed, it is essential that care be exercised in taking impressions, in model construction, in securing wire measurements, in the selection of proper shades of teeth, and the various other steps that must necessarily be carried out in the dental office. If these details are properly looked after by the dentist, and he sends his work to a high-grade, dependable dental laboratory, he may rest assured that the final results will be highly satisfactory, both to himself and to his patients.

Packages frequently receive very rough handling in the mail, and great care should be exercised in packing preparatory work so that it will reach the laboratory in good condition.

### A FEW SUGGESTIONS

*Cast Gold Clasps, Saddles and Appliances, Bar Dentures, etc.*—All impressions for cast gold clasps, saddles and bars should be taken in Complaster. Impressions for this class of work must be *absolutely*

*perfect.* The cast clasps and saddles or cast bars should always be sent to you for fitting. You should then take a bite and impression with all in position for completion of case.

Where crowns or bridges are used as abutments to carry patent attachments, the crowns or bridges should be made first and then a bite and impression taken with same in position.

Removable dentures with cast clasps and attachments are now being used quite extensively and are proving very satisfactory. A few of the best laboratories specialize in this class of work and are glad to submit plan of construction and approximate price of any case upon receipt of study models.

*Plate Work.*—For perfectly-fitting dentures the writer recommends the closed-mouth method of impression and bite taking. If every dentist will take the time to study and master the principles of this, and will instruct his laboratory to make his dentures in accordance with the closed-mouth, muscle-trimmed method, his plate troubles will be at an end.

All metal bases should be tried in the mouth and bite taken before completing, and where time will permit they should be tried in a second time with teeth set up in wax.

Artificial stone models are recommended for particular cases.

*Crown and Bridge Work.*—For gold crowns take bite, plaster impression and wire neck measurement. State if you wish crowns heavily reinforced. Abutment crowns for bridge work should be fitted to the teeth and a new bite and impression taken for the completion of the bridge. While hundreds of bridges are made complete over one model, it is always safer to try the crowns on first.

*Contour Crowns.*—These crowns are especially designed for restoring broken down incisal angles in teeth which are too frail for gold fillings or inlays. Send your laboratory plaster model and mark with lead pencil the extent of the cavity which is to be restored with gold. Open-faced crowns are recommended to anchor synthetic cement fillings where the angle or incisal edge of the tooth is involved.

*Cast Gold Inlays.*—Prepare cavity with square base, sharp, well defined margins and no undercuts. Insert a filling in inlay wax in exactly the same manner as you would any other plastic material, contouring the wax to the exact shape you wish the finished inlay. Cool thoroughly, insert a pointed instrument in center of occlusal surface of inlay and carefully remove from cavity. Put the wax filling in a small bottle of water, pack carefully in wooden mailing box and send to laboratory for casting.

## GENERAL INFORMATION

Do not use modeling compound for bites—beeswax is better.

Do not expect perfect results from imperfect models and impressions.

Do not *rush* your laboratory unreasonably.

Be explicit in writing instructions—do not leave anything for your laboratory to guess at.

For prompt mail service, packages should be sent by *first-class special delivery mail*, with letter enclosed in box.

Packages sent by Express, Registered, or C. O. D. mail are longer in transit than regular mail or Special Delivery.

Always put your name or initials on package.

Always write a letter of instructions regarding every package.

Co-operate with your laboratory and you will be well repaid.





## EXTRACTIONS



No Literature can have a long continuance if not diversified with humor—ADDISON

"Nurse, did you kill all the germs in baby's milk?"

"Yes, ma'am; I run it through the meat chopper twice."

A current yarn about a liquor-loving Irishman has a smile in it. "Father," said he, on meeting the parish priest one day, "phwat is lumbago?" Seeing an opportunity for needed reproof, the good father replied: "'Tis a terrible disease which comes from drinking up booze and chasing around nights."

"Is that so?" said Pat. "It says in the paper that the pope has lumbago."

(Sign in a Chicago barber shop)—During alterations patrons will be shaved in the back.

"What is your attitude toward jazz?"

"I'm not letting it worry me," said the elderly citizen. "A Nation that can survive hoopskirts, bustles and side whiskers, can live down jazz."

Girl—Have you hair nets?

Clerk—Yes, ma'am.

Girl—Invisible?

Clerk—Yes, ma'am.

Girl—Let me see one.

The ad. writer who said, "You remember the quality; you forget the price," wasn't talking about war.

Mrs. Newlywed—I want to buy some cigars for my husband.

Dealer—Light or dark, madam?

Mrs. Newlywed—I can't see what possible difference it can make to you, but if you insist upon knowing, he is a decided brunette.

(Lawyer)—And what was the defendant doing meanwhile?

(Witness)—He was telling me a funny story.

(Lawyer)—Remember, sir, that you are under oath.

(Witness)—Well, anyway, he was telling me a story.

The world is becoming safer in some respects. You never hear now of a lady catching the heel of her shoe in the ruffle of her dress and falling downstairs.

(Notice)—If the lady who stuck her gum on my chair at the movies last night will call she may have the gum. If the gum won't come off, she can have the pants, too.

(How to use a telephone)—Take up receiver. Yell "Hello!" Yell "Hello!" again. Yell "Hello!" six times. Then yell only the first syllable of "Hello." Then put the last syllable before the first and yell that. Then hang up.

(Biographical)—His father was a minister of the Free Church. His mother was dead, too.

First Undergrad.—What shall we do tonight?

Second Undergrad.—I'll spin a coin; if it's head we'll go to the theatre; tail, we go to the dance, and if it stands on edge, we'll study.

### A FATHER'S GRIEF

I've got a letter, parson, from my son away out West,

An' my ol' heart is heavy as an anvil in my breast,

To think the boy whose futur' I had once so proudly planned,

Should wander from the path o' right an' come to sich an end.

I told him when he left us, only three short years ago,

He'd find himself a-plowin' in a mighty crooked row—

He'd miss his father's counsels an' his mother's prayers, too,

But he said the farm was hateful, an' he guessed he'd have to go.

His letters came so seldom that I somehow sort o' knowed

That Billy was a-trampin' on a mighty rocky road,

But never once imagined he would bow my head in shame,

An' in the dust 'd waller his ol' daddy's honored name.

He writes from out in Denver, an' the story's mighty short;

I just can't tell his mother; it'd crush her poor ol' heart;

An' so I reckoned, parson, you might break the news to her—

Bill's in the Legislatur', but he doesn't say what fur."

## FUTURE EVENTS

The next regular examination of the PENNSYLVANIA BOARD OF DENTAL EXAMINERS will be held in Philadelphia and Pittsburgh on Wednesday, Thursday, Friday and Saturday, December 14, 15, 16 and 17, 1921. The theoretical examinations will begin on Wednesday, December 14th, and will be held in the Musical Fund Hall, Philadelphia and the University of Pittsburgh, Pittsburgh. The practical examination will be held on Saturday, December 17th, at the Philadelphia Dental College and the University of Pittsburgh.

The examination for dental hygienists will be held at the same places on December 15, 16 and 17.

Application papers for the above examination may be secured from the Department of Public Instruction, Harrisburg.

ALEXANDER H. REYNOLDS, *Secretary*,  
4630 Chester Avenue, Philadelphia, Pa.

The third annual meeting of the AMERICAN ACADEMY OF APPLIED DENTAL SCIENCE, of which Dr. Bertram Ball is president, will be held on January 9, 10 and 11, 1922, at the Stacy-Trent Hotel, Trenton, New Jersey.

One of the interesting features of the meeting will be the visit to the New Jersey State Hospital, where Dr. Henry Waite Cotton will tell of his success in the treatment of patients with mental disorders through the eradication of foci of infection, many of which originate in the mouth and about the teeth.

The Twenty-Ninth Annual Meeting of the AMERICAN INSTITUTE OF DENTAL TEACHERS will be held at the Winsor Hotel, Montreal, Quebec, on January 23, 24, 25, 1922.

An interesting program has been arranged, built around the theme of Preventive Dentistry and its correlated subjects—What, When, How and Why to Teach. There will also be a complete exhibit of scientific teaching apparatus, college equipment, etc.

All interested in dental teaching are cordially invited to attend.

GUY S. MILLBERRY, *President*,  
ABRAM HOFFMAN, *Secretary-Treasurer*,  
381 Linwood Avenue, Buffalo, N. Y.

At Trenton, N. J., January 9, 10 and 11, 1922, the third annual meeting of the AMERICAN ACADEMY OF APPLIED DENTAL SCIENCE will be held.

Dr. Henry A. Cotton, will give a bacteriological and pathological exhibit of the work being accomplished at the New Jersey State Hospital. Class work, papers and clinics will be features of the meeting. All members of the dental and medical professions are cordially invited to attend. Information gladly furnished upon request to Clerk, American Academy of Applied Dental Science, Yonkers, N. Y.

The thirty-ninth annual meeting of the MINNESOTA STATE DENTAL ASSOCIATION will be held at the Minneapolis Armory, on February 22nd to 25th, 1922.

C. H. TURNQUIET, *Secretary*.

The Fifty-second Annual Meeting of THE NEW JERSEY STATE DENTAL SOCIETY will be held May 3, 4, 5, 1922, at the new Stacy-Trent Hotel, Trenton, New Jersey.

For details address Dr. R. S. Hopkins, 913 Broad Street, Newark, New Jersey, Chairman of the Exhibit Committee, or the Secretary, Dr. F. K. Heazleton, 223 East Hanover Street, Trenton, New Jersey.

## STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS, OF AUGUST 24, 1912

OF THE DENTAL DIGEST  
at New York, N. Y.  
State of New York  
County of New York

Published monthly  
for October 1, 1921

Before me, a Notary Public in and for the State and county aforesaid, personally appeared John R. Sheppard, who, having been duly sworn according to law, deposes and says that he is the Secretary of the Dentists' Supply Co., Publishers of THE DENTAL DIGEST, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are:

| NAME OF   | POST OFFICE ADDRESS                       |
|---|---|
| <b>Publisher, THE DENTISTS' SUPPLY COMPANY</b>          | 220 West 42nd St., New York               |
| <b>Editor, GEORGE WOOD CLAPP</b>                        | New Rochelle, N. Y.                       |
| <b>Managing Editor, GEORGE WOOD CLAPP</b>               | New Rochelle, N. Y.                       |
| <b>Business Manager, LAWRENCE W. DUNHAM</b>             | New Rochelle, N. Y.                       |
| 2. That the owners are:                                 |   |
| <b>THE DENTISTS' SUPPLY COMPANY</b>                     | 220 W. 42d St., N. Y.                     |
| <b>DE TREY &amp; CO., LTD.</b>                          | 23 Swallow St., London, England           |
| <b>GEROY FRANTZ</b>                                     | Sutton Manor, New Rochelle, N. Y.         |
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DE TREY & CO., LTD., is a corporation organized under the laws of England, with an authorized capital stock of 2,000,000 shares of One Pound each, ownership of which is scattered over a considerable part of Europe and includes a long list of names unknown to us, and probably a number of banks and other corporations.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

THE DENTISTS' SUPPLY COMPANY,

J. R. SHEPPARD, *Sec'y & Treas.*

Sworn to and subscribed before me this 26th day of September, 1921.

[Seal]

GRETCHEN M. BALZ  
Notary Public, Westchester County  
Certificate filed in N. Y. County  
Clerk's No. 631; Register's No. 3520—My commission expires March 31, 1923.

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# THE DENTAL DIGEST

GEORGE WOOD CLAPP, D.D.S., EDITOR

Published monthly, by THE DENTISTS' SUPPLY COMPANY, 220 West 42nd Street, New York, U. S. A., to whom all communications relative to subscriptions, advertising, etc., should be addressed.

Subscription price, including postage, \$1.00 per year to all parts of the United States, Philippines, Guam, Cuba, Porto Rico, Mexico, and Hawaiian Islands. To Canada, \$1.40. To all other Countries, \$1.75.

Articles intended for publication and correspondence regarding the same should be addressed EDITOR DENTAL DIGEST, Candler Bldg., Times Square, 220 West 42nd Street, New York, N. Y.

The editor and publishers are not responsible for the views of authors expressed in these pages.

Entered as Second Class Matter, at the Post-office at New York City, N. Y., January 29, 1909, under the Act of Congress, March 3, 1879.

## OUR COVER THIS MONTH

No patriotic publication can consistently ignore or overlook the amazing events taking place in the closing days of this very remarkable year 1921. Not the least amongst these happenings was the "coming home" of the unknown soldier, whose final resting place will forever be a symbol or reminder of our country's willing sacrifice of life on the battlefield to maintain the right to liberty and national security.

Our cover shows a very beautiful picture of the glorified one lying in State in the Capitol Building at Washington. For a full appreciation of what this event means, we take the liberty of directing the reader's attention to the article reprinted in the Editor's Corner space of this magazine. You should read it.



## The Unknown Soldier\*

The Unknown American has come home—come home without name or age, without birthplace, East or West or North or South, without a place in all the continent that can call him its own, without father or mother, sister or brother or friend, without ancestry, without posterity, without rank or office, without vocation, except that of serving his country and the cause to which it asked him to offer his life. What skill was in his hand, what speech was on his lips, what dream or ambition was in his mind, what love was in his heart, no mortal will ever know. He, the homeless, parentless, friendless one, has come back to find America herself his mother, teacher, friend, and her own "God's acre" his permanent home. The ship that brought him was greater than King Arthur's dusky barge with the "three queens with crowns of gold" upon the decks "dense with stately forms." It was a ship once the flagship of an Admiral. The greatest citizens of his time have stood with bared head in his presence, though he was but a youth when his years ended. The greatest Generals of the world have saluted him, though he may have been but a private. The poets have sung his praise. Beyond all this tribute of presence and speech, a hundred million men, women and children will pause today in thought of him and pay an homage of silence more eloquent than speech.

But, in winning all this honor, he has lost not only his life but also his identity. He has stripped himself of everything that identifies his mortality on putting on immortality. Yet by sacrificing his identity not only has he shared it with every American who lies in France, and indeed with every American who perished on land or sea in the great war, but he has let every American at home find his or her hero in the casket of the Unknown. If one could but see the character of man who rises in each person's thought in the moments of silence today, one would be able to see in the composite the ideal living American evoked from the unknown dead. This nameless American, defined in a hundred million different ways, would yet be distinguishable as an American. He would have the

\* This beautiful tribute appeared as an editorial in the New York Times, Nov. 11, 1921.

same basic virtues as his comrades, Britain's Unknown Warrior, who lies in Westminster Abbey, close by the memorials of Shakespeare and Milton; the French Poilu Inconnu, buried beneath the Arc de Triomphe; the unidentified Italian, placed in the monument of King Emmanuel, and all the other Unknowns who will ultimately walk the corridors of time along with the greatest of the Known. But, though joining the Immortals as one who comes unnamed, our soldier would be recognized as an American; for the individual unknown American, whatever his parentage, becomes the known American by his daring habit of hopefulness, by his carelessness of self, by his restless mobility, by his pioneering ways, by his youthfulness of spirit. As Marshal Foch said when nearing America, he felt that he was approaching the "land of youth."

The sergeant who designated with a handful of flowers, in Châlons-sur-Marne, the plain wood coffin—one of four—which held the body of him who was to be borne back to America, had no such task as the suitor who stood before the caskets of gold and silver and lead in Portia's palace, for all four of the coffins had bodies of unknown Americans who "had given and hazarded" all they had. The three who were returned to their nameless graves were none the less deserving of the honors that have fallen upon the dust of their comrade, to whose coffin the withered flowers still clung as it was borne ashore at Washington. Indeed, if one of the three taken back to Romagne had been a college boy and remembered his Greek history, he might have had solace in recalling that those who fought most valiantly at Marathon were buried in the fields where they fell and were not brought to Athens, the capital, to be near those who heard the oration of Pericles.

The Unknown Soldier has come home, and in his coming has made universal the sense of exaltation, gratitude and pride which kinsmen and fellow-townsmen have in honoring their own known dead. Today the whole nation, mourning in solemn and united recognition of a sacrifice which it has shared with other nations, through those whom this Unknown Soldier represents, has reached a new and, for the moment, cloudless height, whence to catch a glimpse of America's duty to her dead, whose worth, having displayed itself in deeds, can be sufficiently rewarded only "by honors also shown by deeds."

An old Danube song has the refrain: "Then the soldier spoke from his deep, dark grave: I am content." If this can be the voice from the grave of the Nameless Soldier in Arlington as the morrow of the conference dawns and the new chapter in the world's history begins to be written, then the supreme glory will indeed have come near his dust.

**T**HE most effective and trustworthy dental detergent for *habitual use* is one that offers the combined, or conjunctive, action of chalk and soap.

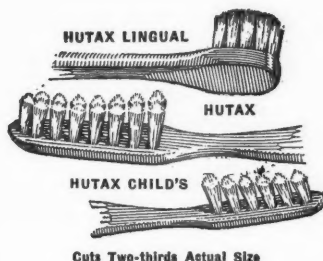
Colgate's Ribbon Dental Cream is a dual-function dentifrice. By the conjunctive action of its chief constituents (chalk and soap) it effects the removal of dental filth without injury to tooth structure or soft tissues.

The popularity of Colgate's Ribbon Dental Cream with the better grades of intellect rests solely on the intrinsic merit of the product.

*Truth in advertising implies honesty  
in manufacture.*

When advisable to prescribe a dentifrice in powder form, remember Colgate's Dental Powder—a standard for many years.

# LISTERINE TOOTH PASTE



Cuts Two-thirds Actual Size

¶Composed of an unusually efficient neutral cleansing and polishing substance, flavored with the essential oils which impart to the antiseptic solution Listerine its agreeable odor and taste—slightly acidulated with a pleasant fruit acid which deters formation of “tartar” about the teeth and provides mild salivary stimulation.

## Hutax Tooth Brushes

*“Hutax” means Mouth Health*

¶We have been appointed United States distributors for these brushes, which were designed by a Committee of Dentists of the International Oral Prophylactic Association. All profit accruing to the Association from their sale is expended for research or education.

¶The Hutax brush, used in conjunction with the Hutax Lingual Brush—which is particularly suited to cleansing the inner surfaces of the incisors, regulating appliances and bridge work—provide the most approved means of tooth brushing. Particulars gladly furnished on request.

**LAMBERT PHARMACAL COMPANY**  
**SAINT LOUIS, U. S. A.**



## Look *for the* Crescent

—The mark we place on Trubyte  
Teeth for your protection.



Thousands of years ago a brick maker in Babylon placed a mark or *character* on each brick which he made. He was proud of those bricks and builders of that day who would build well looked for his mark on the bricks they bought. Other bricks were just bricks. His were

dignified by a *character*. Today every conscientious manufacturer places on his product a mark of identification, a guarantee of quality and evidence of pride in his work. While there is nothing to prevent imitators counterfeiting his goods they dare not imitate his trade mark.

## Trubyte

—the Teeth we are Proud to Mark

The manufacturers of Trubyte Teeth are glad their product is so good that it is worthy of imitation, but there are reasons why we want the dentists of the world to know *genuine Trubyte Teeth* when they see them. So we ask you to "look for the crescent" on the lingual surface of Trubyte anterior teeth. It is your guarantee of genuineness and all that research and skilled workmanship can put into a product.

If there is any question about the teeth you are getting, "look for the crescent."

All reputable dealers carry stocks of Trubyte Teeth. Reputable dental laboratories are glad to use them. They are quick to see that Trubyte Teeth permit them to make dentures which display their workmanship to the best advantage, while their naturalness appeals to your patient and gives character to every denture.

Satisfy yourself that you have genuine Trubyte Teeth and we will be responsible for the result.

RESTORATIONS  THAT RESTORE

*Your Dealer or Direct*

**The DENTISTS' SUPPLY COMPANY**

220 West 42nd Street

New York City

# And Now for Equipment

---

WHEN you have ceased to equip, you have ceased to progress. Whether in things of the mind or in physical things, the process must go on eternally—the replacement of the old with the new, a recognition of the law of evolution.

If our skill and talents are to have full expression, we must have the material helps—not make-shifts—but equipment that renders the highest service; that does not hamper and throttle our effort but supplements it and unflinchingly carries on for us.

The time to equip is now, because no man of broad vision likes to do less than his best; and because the cost of equipment cannot be substantially less through a long period to come. The cost of production is now on a basis where further material reductions cannot be expected.

The natural source of equipment is the reputable dental dealer. He carries in stock the latest devices; he is at hand when parts are required; he maintains experts to fix or adjust anything that demands immediate attention. For his modest profit he gives full value in service.

The trend of modern equipment is towards efficiency and simplicity. The old idea of a multiplicity of articles hanging from the walls and taking up every inch of available space is obsolete. The useless gew-gaws are being discarded. The aim is to concentrate all details into units, simple in design, efficient in use, and expressive of real taste.

This company, through the leading dealers everywhere, is prepared to furnish such equipment. Its great factory was built for the purpose; its expert mechanics are at their posts. The demand for Electro Dental Units has grown steadily since this Unit was first shown a little over a year ago.



Production is fast approaching normal—both in Units, Senior and Junior, and in all of our other specialties.

The future never held so much promise for real dentistry as now. The field is limitless for the man who means to be mentally and physically equipped. We are growing busier every day equipping such men.

---

CAN WE SERVE YOU?

---

Electro Dental Manufacturing Co., Philadelphia

# Why Millions Accepted

## this new dentifrice so quickly

Pepsodent was created but a few years ago. Today millions employ it. Its effectiveness is apparent to every dentist—every day.

The reasons are: Modern authorities approve it. It complies with their requirements and avoids all their objections. Thousands of dentists who know the facts have aided in its adoption.

### Produces six results

Millions who use Pepsodent several times daily obtain the six following results:

1. An increase in salivary flow.
2. Reduced viscosity of the saliva.
3. An increase in ptyalin—the starch digestant in saliva, to remove starchy deposits which ferment into acids.
4. An increase in alkalinity to

neutralize acids which destroy enamel.

5. An attack on mucin plaque in an efficient manner.
6. High polish so that plaque cannot easily adhere.

These results are natural aids to Nature. Diet, rich in starchy foods and deficient in fruit acids, makes them necessary.

### No soap—No chalk

Pepsodent contains no soap and no chalk. Any alkaline tooth paste brings opposite effects.

It contains nothing harmful. Six years of exhaustive experimentation and tests prove this.

Ask the Dental Department any questions. Write for scientific literature. Send the coupon for a tube to test and use at the chair.

**Pepsodent**  
REG. U.S. PAT. OFF.

*A Modern Dentifrice*

An acid tooth paste which brings six effects desired by modern authorities

THE PEPSODENT COMPANY, 665  
7501 Ludington Bldg., Chicago, Ill.

Please send me, free of charge, one regular 50c size tube of Pepsodent, also literature and formula.

Name .....

Address .....

Enclose card or letterhead

*Give your patients the benefit. Write for booklet of 34 pictures showing simplified technique for permanent incisal-corner restorations.*

Address: THE L. D. CAULK CO., MILFORD, DEL.



## DE TREY'S SYNTHETIC PORCELAIN

*The Chemical Porcelain*

distinguished from all ordinary silicate cements and enamels. **STRONGER** than any known cement, either dental or industrial

The Home and Originators of the

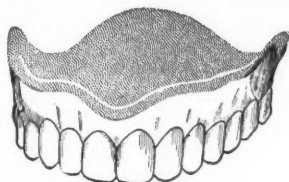
## ***Featherweight Plates***

### **Central Dental Laboratories**

MILLER & GLICK

141 to 145 W. 36th Street  
NEW YORK

218 to 224 So. Wabash Ave.  
CHICAGO, ILL.



LIGHT AS A FEATHER



Our Featherweight Plates are marvels of beauty. These are machine finished plates and are the lightest and yet the strongest plates ever produced.

*Specify Featherweight with your next rubber plate*



Our cast Featherweight Gold Plates light as Feathers. Perfect in adaptation, strong as steel. We can cast in any thin gauge desired.

*Try us on your Removable Bridgework*

# When You Need a Friend

*you always have*

## The Dental Digest

WHETHER it be to advise you on some professional problem, or to give you a brotherly hint, some easy little way of doing a troublesome task; to help you understand and master the economic aspects of your practice; to help you forget work for a while and ramble off for rest and recreation or to take up the gage and fight your fight for you, you always find THE DENTAL DIGEST ready to serve.

That's why you have enjoyed The Digest during 1921.

That's why you will want The Digest during 1922.

The 1922 Digest will contain several new features which will make it even better, of even greater service and value:

**A Continuation of "Brother Bill's Letters."**

**A series of articles by George Wood Clapp, D.D.S., "What It Costs to Render Denture Service."**

**Two new Departments, "Dental Secretaries, Hygienists and Assistants," and "Dental Laboratories."**

**Vacation Number.**

Surely you will want to receive every issue of The Digest during the coming year.

THE DENTAL DIGEST,  
220 WEST 42ND STREET,  
NEW YORK CITY.

Please enter my subscription for 1922.  
Enclosed is my check for \$1.00 (Canada \$1.40; Australia \$3.25; Great Britain and Continent \$2.50; other countries \$1.75).  
Please charge through my dealer who is

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The Digest is still \$1.00 in the United States and its possessions; Canada \$1.40; Australia \$3.25; Great Britain and Continent \$2.50; other countries \$1.75.

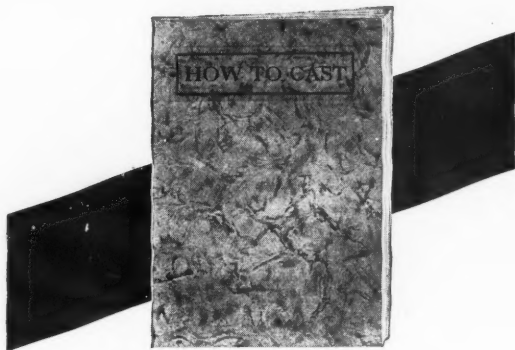
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220 West 42nd Street, New York City



## Send for this *New* Book!

It's the revised, amplified and illustrated edition of "HOW TO CAST."

It is packed full of valuable information on casting and contains the latest and most widely used techniques—cast clasp, cast inlay, full dentures, one-piece castings, deep palate cases, etc.

If you're at all interested in cast work, "HOW TO CAST" belongs in your library.

A postal brings your copy.

Send for it today—before it slips your mind.

**J.F. JELENKO & Co.**  
1 Union Square, New York, U.S.A.



## Specify Williams Dental Golds



**Williams Ready-made Clasps.**  
Seamless, reversible, one-piece  
ready-made. Made from a  
tough high-grade alloy of gold  
and platinum.

GOLD has been gold since the World began but for years and years, Williams has been putting that *something* into it which dental folk call service and satisfaction.

There are often several qualities which would be desirable in a dental gold—but some qualities can be developed only at the sacrifice of another quality. Because we know just how far to develop each so as to produce the best possible “balance”

# WILLIAMS



you will find that Williams Dental Golds are the kind you want.

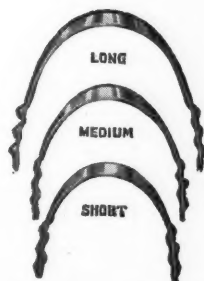
The certain properties you seek in a dental gold for a particular purpose will be found in the Williams Dental Gold *intended* for that purpose.

Specify Williams Dental Gold and your Dental Depot will be glad to know that you too have found the difference.

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The Williams Gold Refining Company

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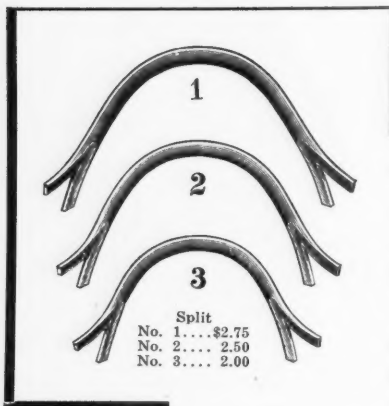


*Williams Ready-made  
 Lingual Bars--for shape,  
 weight and strength. The  
 first made and the best  
 made.*

# DENTAL GOLDS

# there is no middle ground

the lingual bar you must use is either the best or —not.



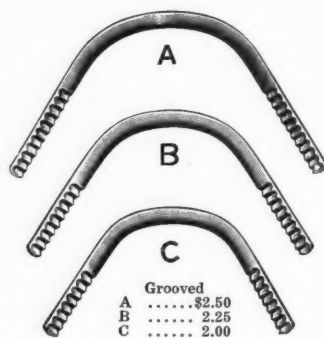
¶ the ever increasing sales, the attempted imitations and your own dealer's preference knock the ground from under "claims," "special patented devices" and "just as good" methods to approach the proven worthwhileness of the

Julius Aderer Split or Grooved Lingual Bar, which for years have been in the foreground as the practitioner's best.

¶ for perfection in shape, strength, rigidity, fit, grip and why you should never use any other lingual bar send in your order to-day direct or to your dealer and then as a result of actual test we are content to let you judge the best.

"Julius Aderer's Products are Inseparably Linked with Satisfactory Results."

*Julius Aderer, Inc., wishes you and your associates a thoroughly enjoyable Christmas.*



## JULIUS ADERER, Inc.

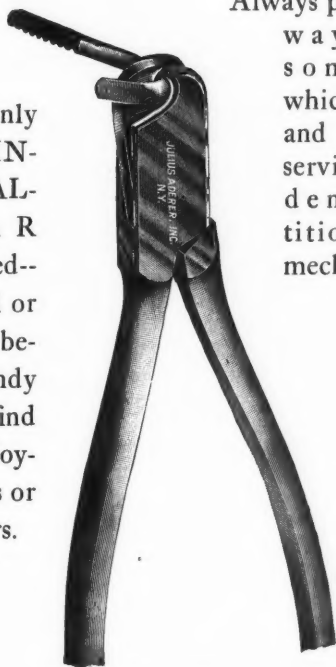
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Main Office

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# Julius Aderer's Service Station

NOW it's the only practical LINGUAL AND PALATAL BAR BENDER offered-- Wherever lingual or palatal bars are being used, this handy instrument will find continuous employment by operators or prosthetic workers.



Always planning, always doing something which shall be and is of real service to the dental practitioners and mechanics.

ORDER  
TODAY  
PRICE  
\$3.50

These pliers are so simple to utilize to advantage that even a novice can bend a lingual or palatal bar to the shape it should have for any normal or abnormal upper or lower denture.

*Should your dealer not carry them in stock tell him to, or order direct.*

## JULIUS ADERER, Inc.

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*"Julius Aderer's Products are Inseparably  
Linked with Satisfactory Results."*

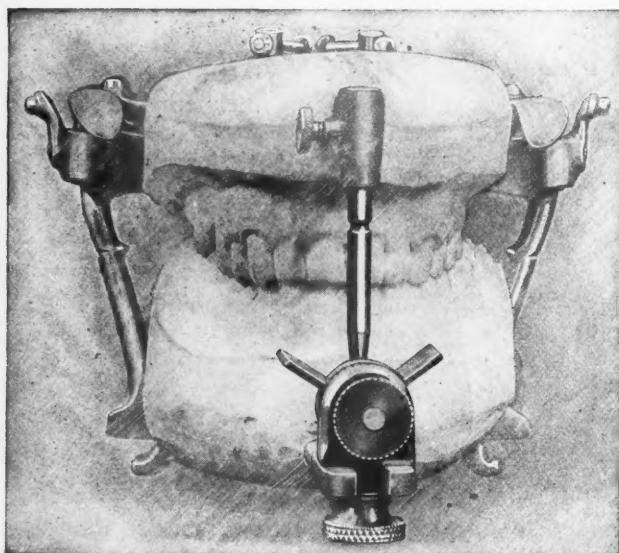
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# The Wadsworth

*Adjustable Incisor Path Guide*

## Attachment

*for the Gysi Simplex Articulator*



*The dark portion of the illustration shows*

*The Wadsworth Attachment Outfit in place on a Gysi Simplex Articulator. The outfit consists of the guide with adjustable planes, a special mandibular model bow and a curved and straight incisor guide pin.*

The Wadsworth Attachment makes the Gysi Simplex Articulator adaptable and increases its usefulness in constructing partial dentures and in bridge work. It is simple and practical.

*Your Dealer or Direct.*

*Descriptive folder on request.*

**THE DENTISTS' SUPPLY COMPANY**

*Sole Manufacturers*

220 West 42nd Street

New York, N. Y.

W

W

*A campaign of education—No. 4*

# The Grinding Surfaces

are more susceptible to decay.



**D**URING the period between childhood and adolescence the most important part of the teeth to be cleaned is the grinding surface. Because the corrugated nature of the enamel is most susceptible to decay. Cleanliness of the grinding surface is of the utmost importance.

*Dr. R. B. Waite's*  
**ANTI-PY-O**  
 Dental Cream

contains vegetable soap which forms a fine lather and quickly enters all the finest interstices. Its germicidal properties are most effective in combating typhoid bacteria which cannot live in soap lather.

**THE ANTIDOLOR MFG. CO.**  
 30 Main St., Springville, N. Y.

*Mail this coupon today*

**ANTIDOLOR MFG. CO.**  
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On receipt of your professional card we will send you special sample tubes of Dr. R. B. Waite's ANTI-PY-O, including a full size tube for your personal use.

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Address .....

City .....

W

W

## Recent Additions to the Clev-Dent Line of Dental Products



To the already extensive line of dental products bearing the trade-mark Clev-Dent as a sign of their origin and quality, a number of new items have recently been added. These include new operating instruments and appliances as well as many of the every day necessities of practice. Those now ready for distribution include:

**Pulp Canal Cleansers**

**Mouth Mirrors**

**Celluloid Strips**

**Polishing Strips**

**Paper and Cloth Disks**

**Base-Plate Wax**

**Rubber Dam**

**Security Wax Cones**

**Automatic Plugger**

**Dr. Graebner's Matrix**

**Dr. Hollenback's Carvers**

**Perry-Black Separators**

**Dr. Bridge's Pliers**

**Whitney Flask No. 20R**

**Donham Flask No. 22A**

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**Dr. Lucas' Curettes L. H. and D. E.**

*The Clev-Dent Catalog will be sent on request*

**THE CLEVELAND DENTAL MFG. CO.**

CLEVELAND, OHIO, U. S. A.



# Do you fully realize the value of Dental Cotton Rolls?

Absolute dryness for operating can be maintained with these Rolls with a saving of time and often much perplexity to the operator and always with less discomfort to the patient than to apply the dam. Their use is indicated for the introduction of all plastic fillings, setting inlays, setting crowns, attaching bridges and for that very important detail, of maintaining a dry field of operation in all treatment cases.

Too great stress can hardly be laid upon the importance of using Cotton Rolls for maintaining dryness in operating upon deciduous teeth where the application of the dam often imparts fear to the child, that may interfere seriously with future operations.

If you are not familiar with their many uses, write your name and address in the blank form below. Cut it out and mail it to us. Samples and the leaflet Suggestions for the use of Dental Cotton Rolls will be sent you.

Free Dr. ....  
Sample Address .....  
Application .....

Johnson & Johnson Dental Rolls  
are sold by leading dealers in  
dental supplies in every country  
in the world.

JOHNSON & JOHNSON,  
New Brunswick, N. J., U. S. A.



When you start your day with a cup of steaming, fragrant coffee, you owe most of the pleasure derived from it to Brazil. If your breakfast table is a mahogany one, that may also have grown in Brazil at one time (as a tree, not as a table). And—oh yes, Brazil gives us Brazil nuts. Of course, this is not the slang version, because a "nut" wouldn't know enough to use

## "GOLDDUST" RUBBER

(Trade Mark Reg. U. S. Pat. Office)

This issue finishes the series of "Trips 'Round the World with 'Golddust.'" To those who have been so unfortunate as to miss the other eleven "trips" we repeat our reasons why you should use "Golddust" for your plate-making: Because it is exceptionally strong, plates made with it are absolutely non-porous, and it is both easily manipulated and vulcanized. It is of low specific gravity, therefore economical to use, and with the minimum of effort you can give it that beautifully lustrous high polish which shows the admixture of finely pulverized aluminum with the rubber. Send the coupon before the year "goes out."

### PRICES:

\$4.50 per pound. \$2.25 per half pound. 1/5th pound sample box (about 7 sheets) \$1.00.

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Dr. ....



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is a guarantee of accuracy,  
workmanship and dependability.  
The absence of any one of these  
elements is a constant menace.

The COLUMBUS DENTAL MFG. CO.  
COLUMBUS, OHIO

# Equipped For Every Case

*The Crown-and-Bridge Worker who has the Precision Shell Machine and the New-Century Outfit can make his own crowns for any case, saving time, labor, money.*

## PRECISION DENTAL SHELL MACHINE No. 2 (Patented)

This shell machine draws a perfect shell from a flat disk—does not wrinkle or thin the gold—finishes with the wall and cap of gold shell exactly the same gage as the disk used.

The disk is driven successively through the die-plate holes, the gold is turned evenly all around—is never stretched or thinned.

The shell may be completed from start to finish in three minutes or less.

Precision Dental  
Shell Machine . . . . . \$45.00

*There is no knack in using the outfit, little to learn about it.  
There is no upkeep—no wear-out to it.*

At Your Dealers

## The S. S. White Dental Mfg. Co.

*"Since 1844 the Standard"*  
PHILADELPHIA

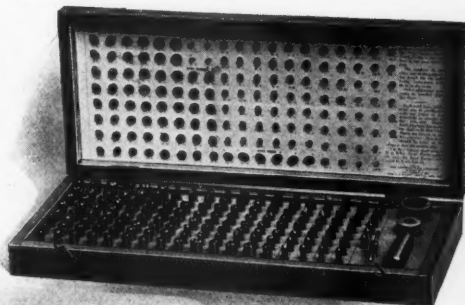
*Descriptive Booklet  
Free on Request*



## NEW CENTURY CROWN OUTFIT (Patented)

Using soft wood as the counter-die this outfit provides the quickest possible method of swaging gold crowns, as easy and economical as it is quick. The gold shell is placed over a steel form—both are driven into the wood block; break the wood away and the crown is removed, it is smooth, accurate, complete—ready for final contouring.

114 Bicuspid and Molar Forms with  
swaging appliances . . . . . \$40.00  
150 Forms Assorted: 114 Bicuspids  
and Molars, 36 Anteriors, with  
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# KERR

## *Essential Instruments in Pulp Canal Preparation*

These instruments are designed to overcome the difficulties of opening up and getting into root canals. Even the most difficult cases can be successfully prepared with these instruments.

### MADE IN THREE STYLES

Style A to be used in Broach Holder, Style B, with knob handle, to be used between thumb and finger, and Style D with 2 $\frac{3}{4}$ " handle.



### KERR PULP CANAL FILES

Made in six regular sizes, XX Fine to extra coarse.



### KERR BROACH REAMERS

AT ALL DENTAL DEPOTS Made in twelve regular sizes, XX Fine to the largest sizes ever required for pulp canal work.

**DETROIT DENTAL MANUFACTURING CO.**  
DETROIT, MICH., U.S.A.

# Definite Properties FOR Definite Requirements

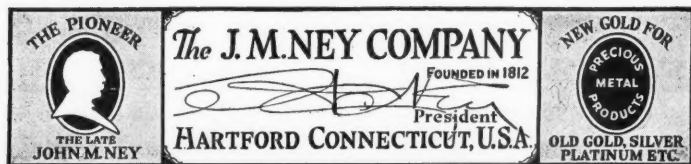
THE several alloys in the Ney-Oro Series were not produced empirically. The inventor waved no magic wand; he stumbled upon no happy formula. He knew dental requirements and he knew metallurgy; he brought the two together. The result is a series of Gold Alloys, each with specific properties to serve definite ends.

Here is one of the series that, in definitely meeting certain requirements in practice, indicates the scientific adaptation of the whole group.

## Ney-Oro "Elastic" Gold

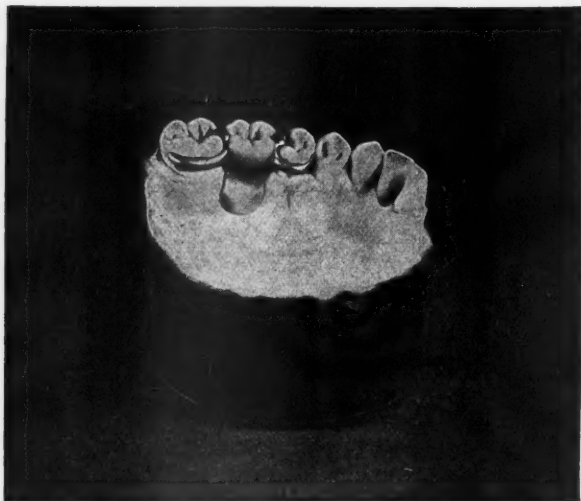
This alloy is far superior to ordinary clasp metal because of its high degree of elasticity and the retention of this property in spite of frequent reheating during bending and soldering operations. Being harder and more resilient than high percentage iridio-platinum alloys, it replaces the latter for many purposes. The melting point is considerably above that of pure gold, and it may be soldered safely with pure gold or any of the alloys below pure gold in melting point. It is especially suitable for crown posts, wrought clasps, lingual bars, split pins and other forms of attachment for removable bridgework because, in addition to its retempering properties, it is less liable to fracture from repeated stress than iridio-platinum or ordinary clasp metal.

*Write for the Ney-Oro Blue Book, which describes each of the various alloys in the series with their approved application.*



# Wiechert Cast Gold Dentures

*By our own process*



## Standard of Perfection in Casting Science

Perfect adaptation and fit — great tensile strength and density which accepts a mirror-like lustre. The most rational development in modern dentistry, a proven and accepted method of the best restoration possible.

*Our Booklet, "Castings," on request.*

**GEORGE A. WIECHERT CO., Inc.**

Specialists in Cast Gold Dentures, Cast Clasps and Removable Bridgework

**556 Seventh Avenue**

**New York City**



## *Radiographic Guidance for Every Dentist*

Leaving too much to his "experience" or "judgment" has proven a poor practice-builder for many a dentist and with present-day legislation involving more and more his professional responsibility, the modern dentist is turning to the X-ray as a means of eliminating the many uncertainties which are met with in everyday practice.

As a properly made radiogram serves as a check on the accuracy of his diagnosis, so the Ritter Dental X-ray Unit provides him the means of obtaining that radiogram—quickly, economically and without any guesswork.

A Ritter X-ray Unit will make yourself and your patients a Christmas present that will last through the years. Why not arrange with your dealer for a demonstration, to-day?

*Catalog Upon Request*

**RITTER DENTAL MFG. CO., INC.**  
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# The R. & R. Noratchet Operating Stool

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Adds years to productive period and earning power.

Shortens the longest day.

Relieves feet and legs of all body weight.

Does not limit the flexibility of the body nor reduce arm-and-hand cooperative efficiency.

Follows the slightest movement of the body as readily as a bicycle, within a radius of 33 degrees from the perpendicular.

Raised and lowered at will without ratchets or screws, and without leaving the seat.

Revolving seat does not alter height.

Readily moved by rolling on base.

*You cannot afford to be "all in" at 3 p. m.*

A blessing to patient as well as dentist, insuring steady nerves and consequent accuracy in performing operations.

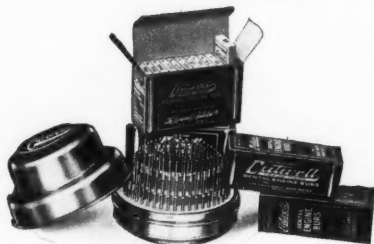
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Price now (reduced)      -      -      -      -      -      \$25.00

*The Ransom & Randolph Company*  
TOLEDO, O. U. S. A.

## YOU CAN'T AFFORD TO IMITATE

*"The Man with the Hoe"*



**Don't Grind,  
and Scrape,  
and Gouge  
and Dig.**

Your patients cannot know what the trouble is—what is giving them pain; but you know, and we know, and they'll be wise enough sometime to find a dentist who doesn't use cheap, imported, "re-sharpened", or any other sort of inferior burs. The loss of a single patient may cost more than the difference in cost of a hundred dozen burs.

***Cutwell* Burs**  
TRADE MARK

are not that kind. They cut easily, smoothly, and clean; they do not grind nor scrape. Patients notice and speak of the "Light Touch".

Their edges are as sharp as the highest-grade alloyed steel can be made—cut sharp by automatic machinery; not hand-stoned or honed. No chances are taken with such an uncertain process. Did you ever try to hone a bur?

***Cutwell*** Burs now cost less than before the war.

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|-------------|---------|-------------|---------|
| One doz.    | \$ 1.00 | One doz.    | \$ 1.50 |
| One gross   | 9.00    | One gross   | 13.50   |
| Three gross | 25.50   | Three gross | 39.00   |
| Six gross   | 48.00   | Six gross   | 75.00   |

Assortments: No. 1, \$9.00, No. 2, \$10.00, No. 3, \$11.50

Made by American workmen of American materials

**Stick to *Cutwell* --it's safest**  
TRADE MARK

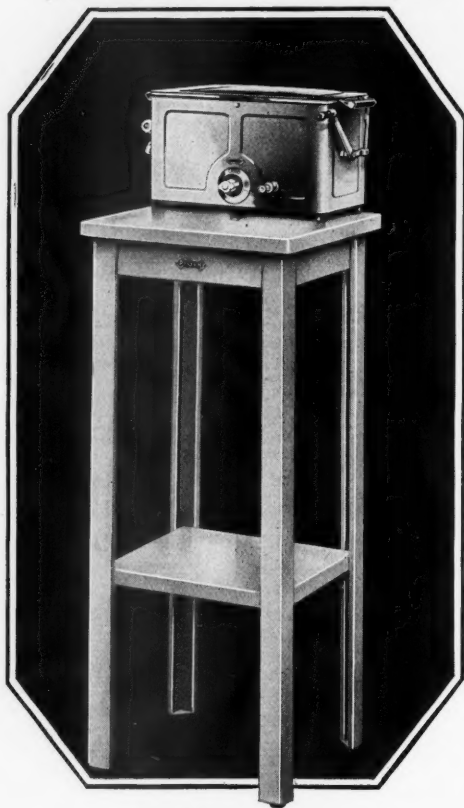
***The Ransom & Randolph Company***  
TOLEDO, O. U. S. A.

**Any Other Sterilizer *plus* One Repair  
Charge**

**Would Cost Far More Than to Buy a**



**"Indestructible" in the first place**



***Ask Your Dealer***

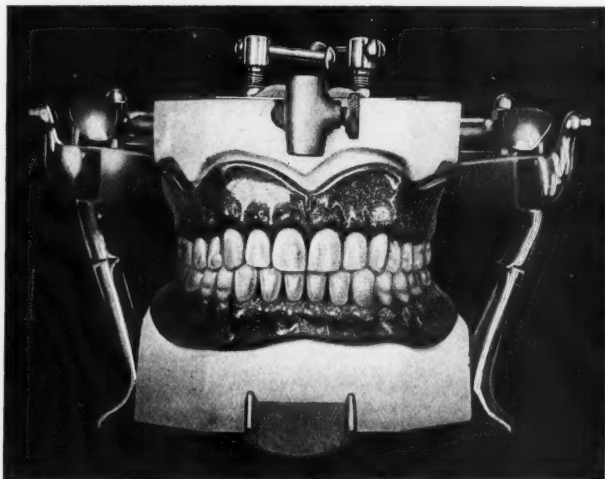
**THE PELTON & CRANE COMPANY**

**Candler Building  
NEW YORK**

**Main Office and Factory  
DETROIT, MICH.**

**Masonic Temple  
CHICAGO**

## This Beautiful Specimen in Your Office



### Will Help You Render Better Service at Better Fees

**JUST LIKE THE PICTURE**—Trubyte teeth anatomically articulated, carved gums with mottled pink, rugae palate, etc. The dentures are fastened to celluloid models or jaws, which are attached to the famous Gysi Simplex Articulator.

It's a time saver, a practice builder and a fee raiser all in one, and—

**YOU DON'T PAY FOR IT—IT PAYS FOR ITSELF!**

## The Dresch Laboratories Company

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 **SEND COUPON TODAY—YOU CAN'T GO WRONG**

#### THE DRESCH LABORATORIES CO.,

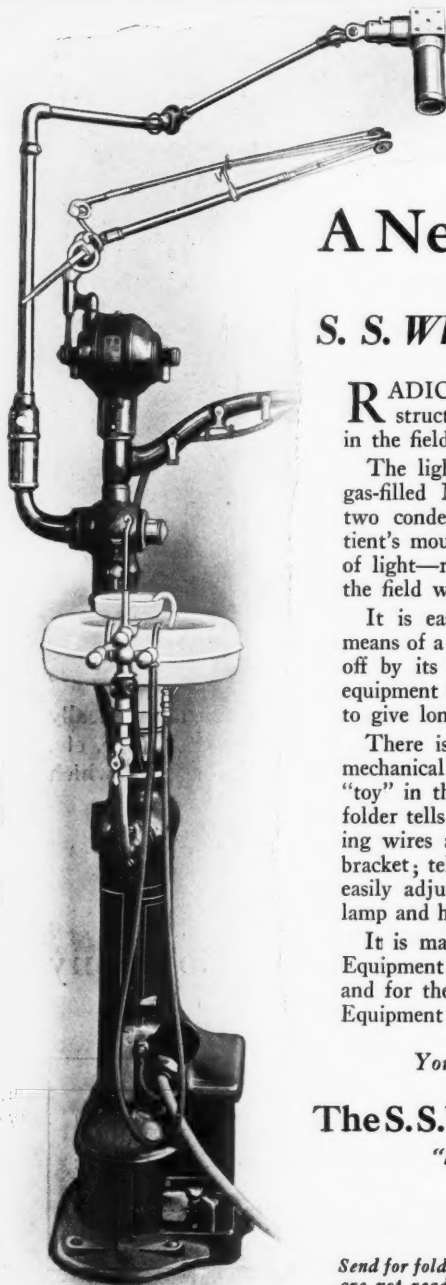
622 Madison Avenue, Toledo, Ohio.

Please send on approval one Dresch Mounted Model. After three days I will either return the model or send you the first payment of \$15.00, and \$10.00 every thirty days thereafter until the total \$35.00 is paid. It is further understood that I may return the Model in good condition within one month and have all payments refunded.

Signed .....

Sign and pin this  
to your letterhead.

Address .....



## A New Illuminator

### *The* **S. S. White Revelation Light**

**R**ADICALLY different in design and construction, this new light is a real advance in the field of dental illuminators.

The light-rays from a small but powerful gas-filled Mazda bulb are reflected through two condensing lenses, focusing on the patient's mouth, in a clear, intense white beam of light—restricted in diameter to cover only the field where the illumination is wanted.

It is easily operated, readily adjusted by means of a jointed metal bracket, turned on or off by its own little switch, and the entire equipment is built to do its work properly and to give long, continued service.

There is nothing loosely put together, no mechanical detail slighted, nothing of the "toy" in the Revelation Light; an illustrated folder tells all about it, tells how the conducting wires are concealed in the hollow metal bracket; tells why the joints are firmly, yet easily adjusted, explains the principle of the lamp and how to take it apart if you want to.

It is made primarily for the S. S. White Equipment Stand No. 3, for any now in use and for the recent models, and for the No. 2 Equipment Stand.

*Your Dealer Can Supply You*

**The S. S. White Dental Mfg. Co.**

*"Since 1844 the Standard"*

**Philadelphia**

*Send for folder; it will interest you even though you are not ready to add the light to your equipment.*



## Join Our Club

There is perhaps no more interesting, virile, human, alive with flashes of humor and pathos department in Dental Journalism than "Around the Table" in

### Dental Items of Interest

Topics of vital interest to the dentists are discussed in an easily flowing literary style, so that the busy dentist reads this eagerly and avidly, getting real enjoyment and relaxation out of it as though it were his favorite popular novel.

This is but one of the features of "ITEMS", which alone is worth the subscription price.

Dr. Mendel Nevin's new book on Conduction and Infiltration Anesthesia is to appear serially in the magazine beginning with the January, 1922, number. It will be beautifully illustrated and will contain a large size chart of the Trifacial Nerve, which can be framed and hung in your operating room.

Now, Doctor, before it escapes your mind, sign your name below and let us do the rest. It is an investment which is sure to pay 1000% dividends. Make it three years while you are at it.

#### DENTAL ITEMS OF INTEREST PUBLISHING CO.

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Send me ITEMS for ..... year(s) and charge through my dealer.

Dr.....

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1 year..... \$1.50

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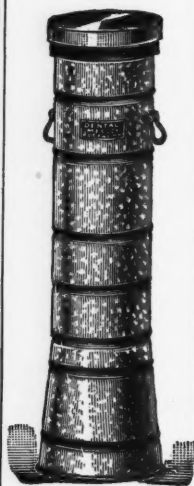
# MODERN METHODS

require modern appliances in the laboratory as well as in the office.

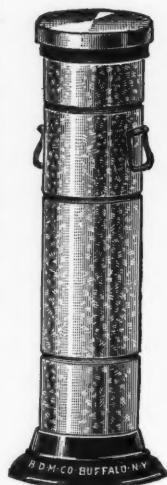
And modern methods of swaging require an anvil made for the purpose; one that can be used for full dentures just as effectively as for a simple cusp, and which will produce the desired result with as little expenditure of time and effort as possible.

The Buffalo No. 113 is just such an Anvil and it is built to withstand any amount of pounding without the noise and jarring which usually accompanies such work. The solid iron head is imbedded in sand which receives the blow and absorbs the noise and recoil. The casing is sufficiently rigid to prevent buckling and it takes up very little room.

Your Dental Dealer sells them.



No. 113



No. 113-B

**BUFFALO DENTAL MFG. CO.**

**BUFFALO, N. Y., U. S. A.**

**Makers of the Lewis Cross Bar Vulcanizer**

¶ knowledge and skill availeth not:  
wasted time and cussedness neither  
soothes nor satisfies—

### "DENTURCAST"



### "CASCLASP"

¶ when you use  
an inferior casting  
gold. Because you are  
assured that (and  
you will quickly  
come to know it,  
too) you can obtain  
ideal results  
with the Julius  
Aderer perfect  
casting golds you  
go on with your  
work happily and  
profitably—

¶ all the paramount qualities are inherent in these time and  
test proven casting golds—greater strength, durability, re-  
siliency and better density; in a class by themselves when  
it comes to workability and color. Stop taking chances—  
Proven perfect and profitable in practice by practitioners and  
mechanics the world over for many years is your best assur-  
ance of these better casting golds—"Denturcast" and  
"Casclasp."

¶ there's a valuable little folder, free for  
your asking, "Hints on Melting and Cast-  
ing" it's called. Get it today. A card  
brings it.

*Julius  
Aderer, Inc.  
wishes you  
and your  
associates a  
thoroughly  
enjoyable  
Christmas.*

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PRODUCTS ARE  
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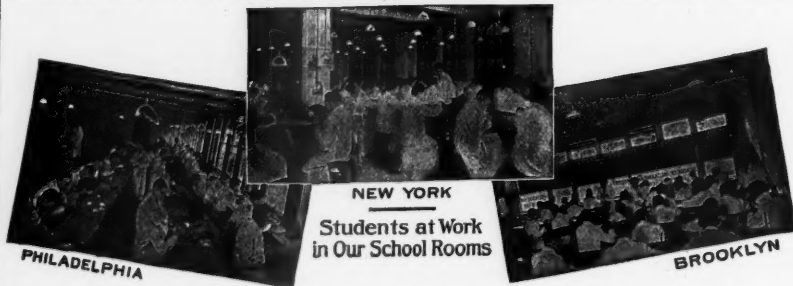
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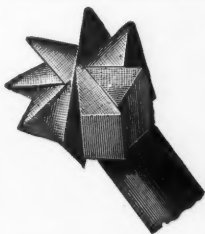
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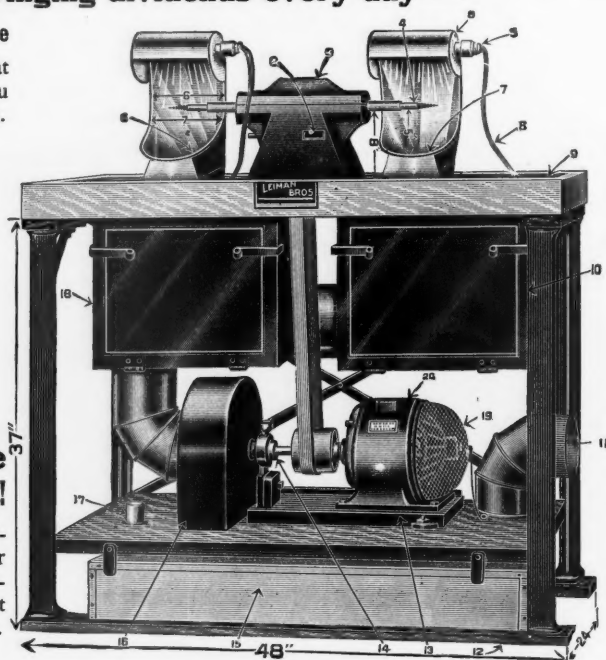
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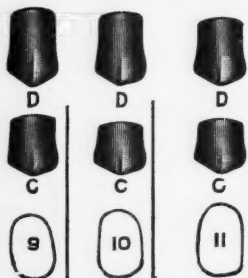


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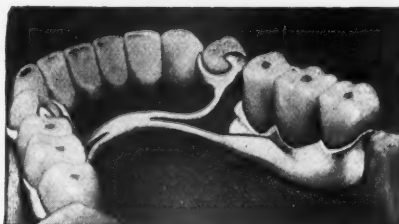
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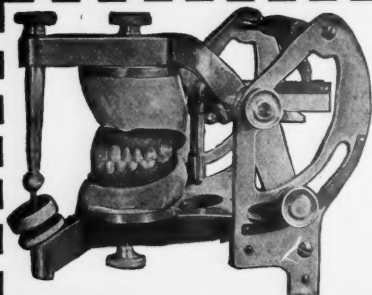
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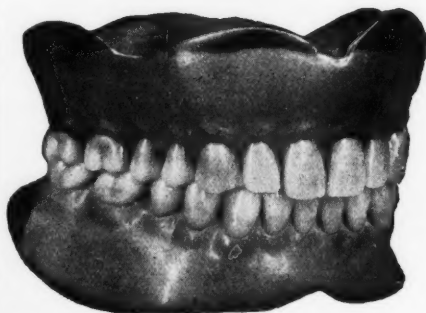
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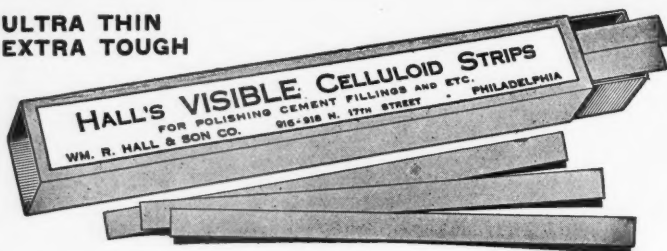
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# No Better Alloy

## Ever Went into a Tooth

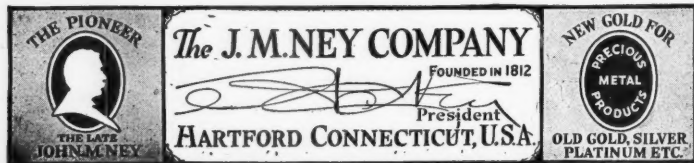
**BY** every test, scientific or practical, by its tooth-saving properties, its endurance, its ease of manipulation—

### *NEY-ALOY*

is as satisfactory, as uniform and as dependable as any alloy that present-day science can produce. (Only our modesty keeps us from saying it is superior to any.)

We didn't produce a good alloy and then go to sleep. As a dentist advances in technique, so we have made progress in the science of alloy-making. We have developed processes of such exactitude that we might say this alloy is the ultimate but—we doubt it. There are still **worlds to conquer.**

*Test the truth of this advertisement with a 5-oz. package of Ney-Aloy. \$10.00 at nearly all dealers.*

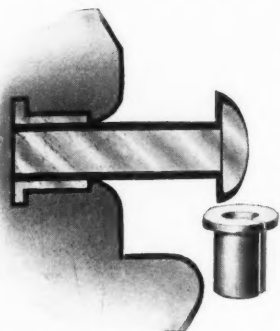


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# Strength! Resistance!

*The Outstanding Qualities of*

## Twentieth Century Solila Teeth



Diagrammatic view of the Twentieth Century Split-ring Anchorage and the Solila Gold-clad Pin.

Which Distinguish Them From All Other Medium-Priced Artificial Teeth

Checking of the porcelain in "T.C." Solila Teeth is practically unknown.

Oxidized pins have yet to be found in "T. C." Solila Teeth.

Pins corroded and weakened by oral fluids, particularly in "acid" mouths, are never Solila Gold-clad Pins.

Assurance that Twentieth Century Solila Teeth are strong in these three vital points makes them the only medium-priced teeth you can safely use.

The split-ring anchorage, baked in the porcelain, gives with the contracting porcelain. Into it the Solila Gold-clad pin is soldered, preventing a tooth weakened by fractures caused by the porcelain contracting against an unyielding, expanding metal pin in the furnace.

Soldering in the pin after baking eliminates oxidation of the pin by the intense oven heat.

The covering of pure gold on the Solila Pin makes it impervious to oral fluids, should any slight defect in the vulcanite leave access to the pin.

*Why Experiment when a Tooth of Proven Merit is Obtainable? Use Twentieth Century Solila Teeth and be Safe.*

Your Dealer or Direct

### THE DENTISTS' SUPPLY COMPANY

*Sole Manufacturers*

220 West 42nd Street

New York, N. Y.

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# Courses in Applied Dental Economics

**F**OURTEEN DENTISTS took the first course in economics, which ended November 19, 1921.

At its close they joined in expressions of enthusiastic approval. They believe it will make them better dentists and better business men.

The instruction covered the following subjects: A larger conception of the dentist's place and possibilities; the making of proper professional records; the principles of bookkeeping and cost accounting as a basis for fees; the principles of office management to develop the maximum number of income hours in 2,000 office hours, including the selection and training of help; judicious credit and prompt collection of fees; the principles of accumulating a surplus and its proper use.

## OTHER COURSES

A few names are now on a waiting list for another course which can be given in January if 20 dentists desire it. Dentists who would like to take it then are invited to add their names to this list and receive literature. Time, 5½ consecutive days. Fee, \$100, half payable in advance, the balance at the commencement of the class. The fee will be returned to any dentist who, at the close of the class, says it has not been worth his tuition fee, transportation, hotel bill, and what he lost by closing his office for the week.

Dentists are also invited to add their names to the lists waiting for April, May and June classes. No classes in February.

All classes are under the personal direction of Dr. Clapp.

Address all communications to

The Research Division,

**THE DENTISTS' SUPPLY COMPANY,**  
220 West 42nd Street, New York, N. Y.

